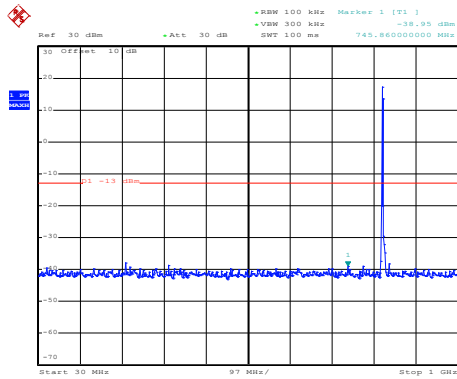
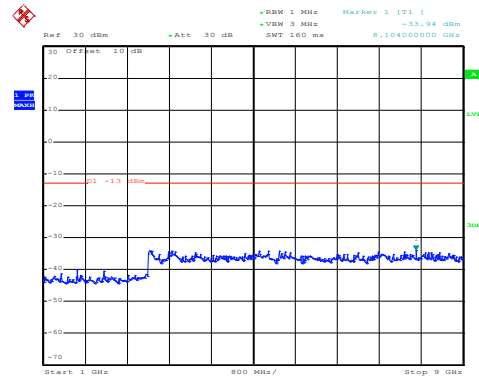


## LTE Band 5: 16 QAM & RB Size 1 BW: 5MHz Lowest channel



Date: 11.OCT.2019 14:48:56

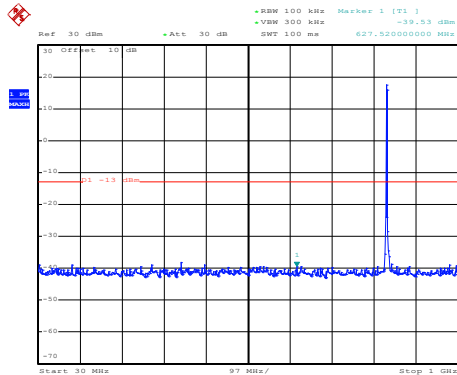
30MHz~1GHz



Date: 11.OCT.2019 14:55:44

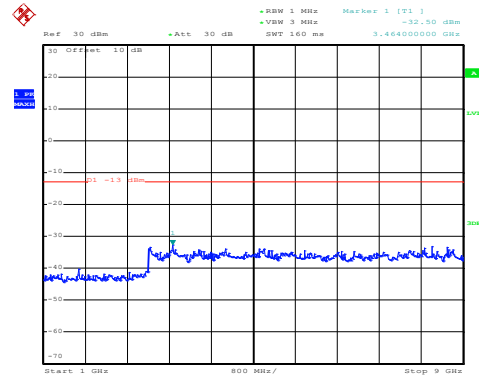
1GHz~9GHz

## Middle channel



Date: 11.OCT.2019 14:49:55

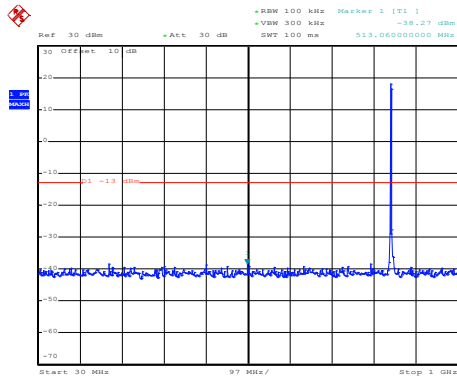
30MHz~1GHz



Date: 11.OCT.2019 14:56:26

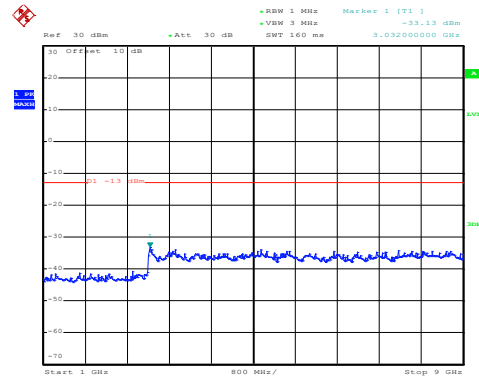
1GHz~9GHz

## High channel



Date: 11.OCT.2019 14:50:20

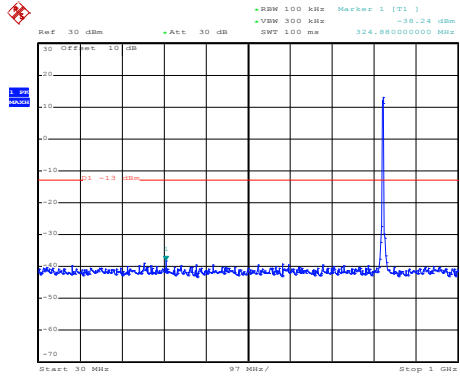
30MHz~1GHz



Date: 11.OCT.2019 14:56:43

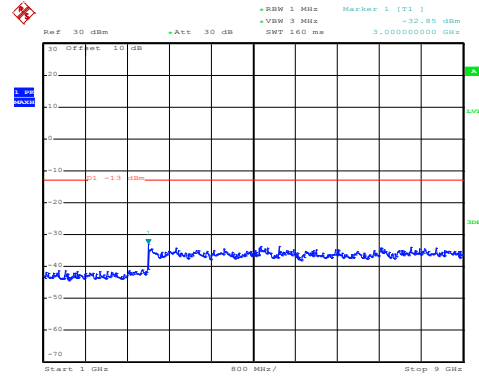
1GHz~9GHz

## LTE Band 5: 16 QAM & RB Size 25 BW: 5MHz Lowest channel



Date: 11.OCT.2019 14:49:15

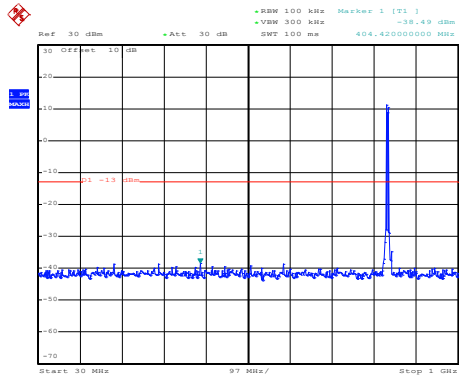
30MHz~1GHz



Date: 11.OCT.2019 14:55:58

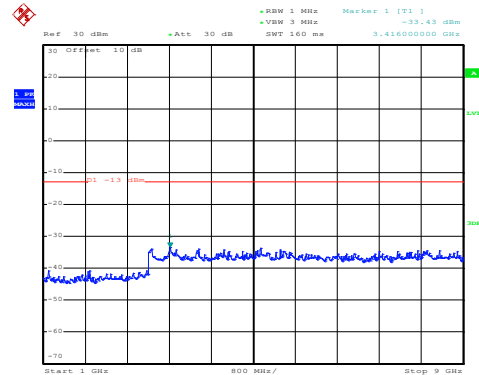
1GHz~9GHz

## Middle channel



Date: 11.OCT.2019 14:49:36

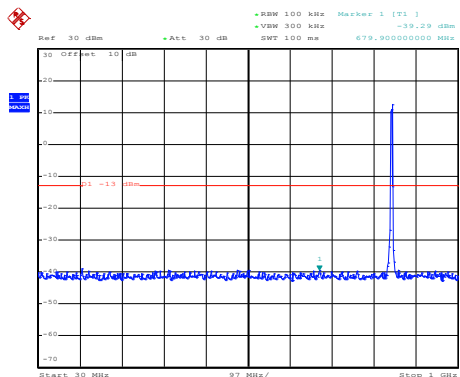
30MHz~1GHz



Date: 11.OCT.2019 14:56:12

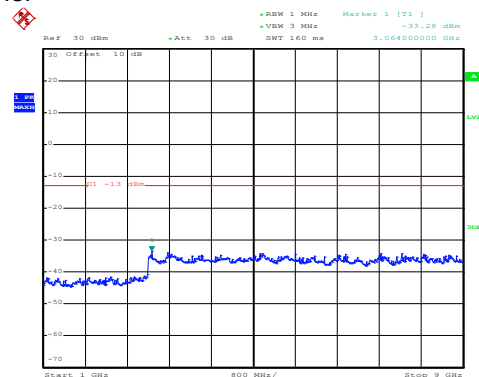
1GHz~9GHz

## High channel



Date: 11.OCT.2019 14:50:40

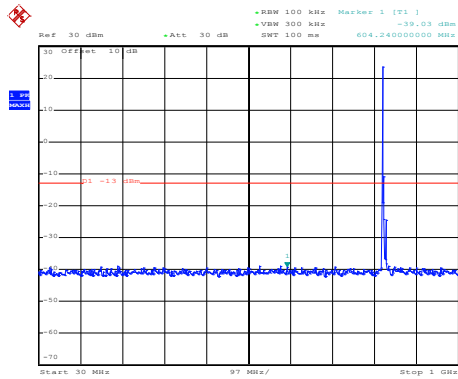
30MHz~1GHz



Date: 11.OCT.2019 14:56:57

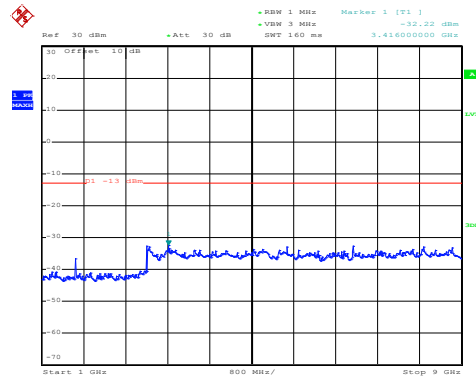
1GHz~9GHz

## LTE Band 5: QPSK & RB Size 1 BW: 5MHz Lowest channel



Date: 11.OCT.2019 14:48:48

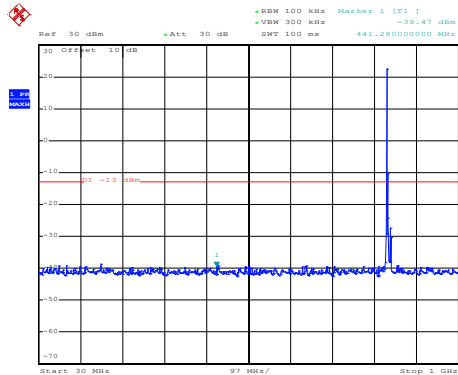
30MHz~1GHz



Date: 11.OCT.2019 14:55:38

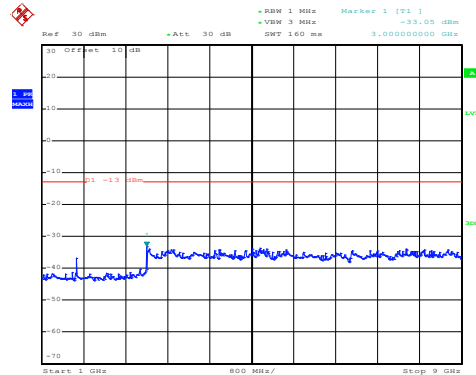
1GHz~9GHz

## Middle channel



Date: 11.OCT.2019 14:49:46

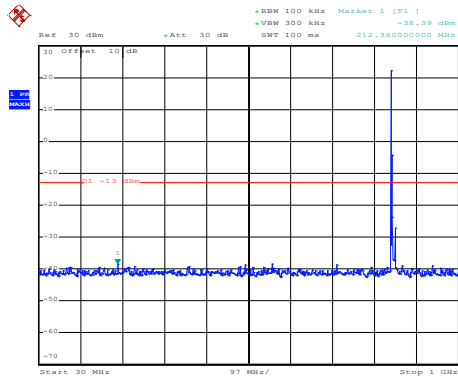
30MHz~1GHz



Date: 11.OCT.2019 14:56:20

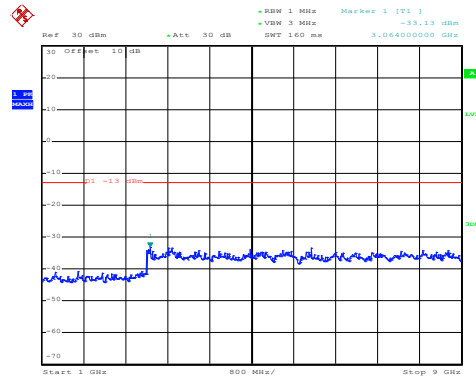
1GHz~9GHz

## High channel



Date: 11.OCT.2019 14:50:11

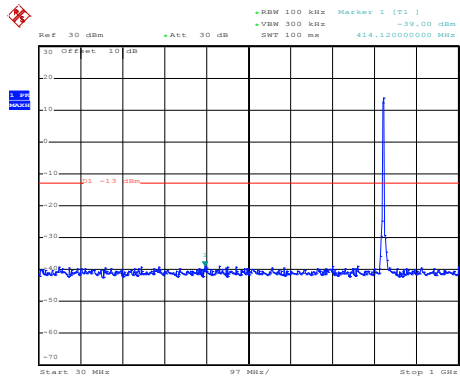
30MHz~1GHz



Date: 11.OCT.2019 14:56:37

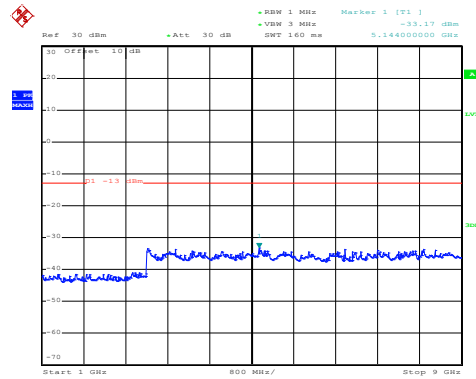
1GHz~9GHz

## LTE Band 5: QPSK & RB Size 25 BW: 5MHz Lowest channel



Date: 11.OCT.2019 14:49:08

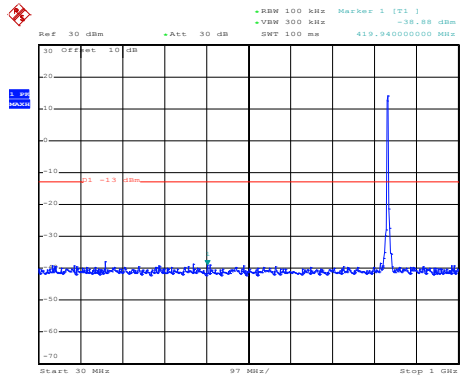
30MHz~1GHz



Date: 11.OCT.2019 14:55:52

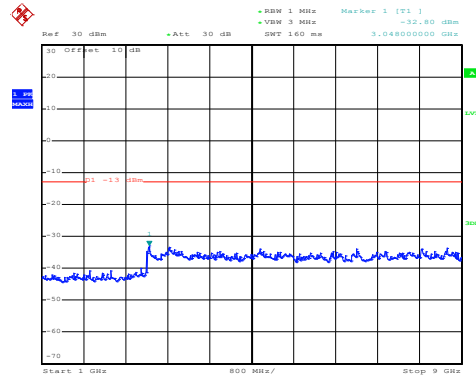
1GHz~9GHz

## Middle channel



Date: 11.OCT.2019 14:49:30

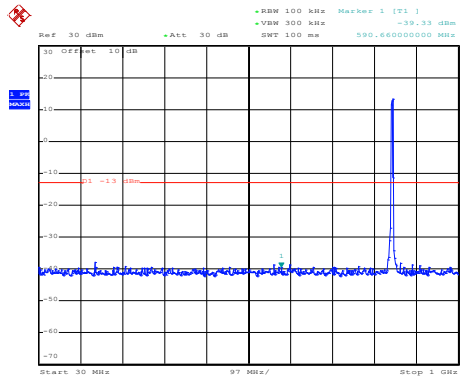
30MHz~1GHz



Date: 11.OCT.2019 14:56:07

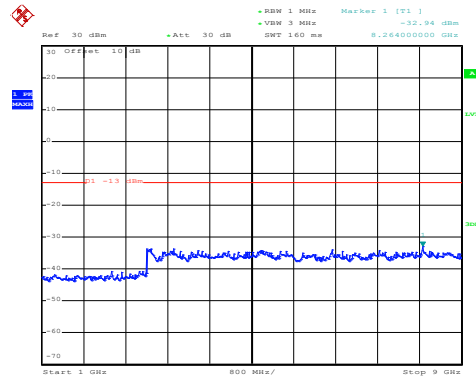
1GHz~9GHz

## High channel



Date: 11.OCT.2019 14:50:32

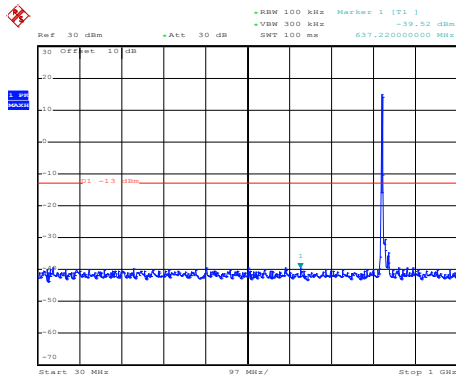
30MHz~1GHz



Date: 11.OCT.2019 14:56:51

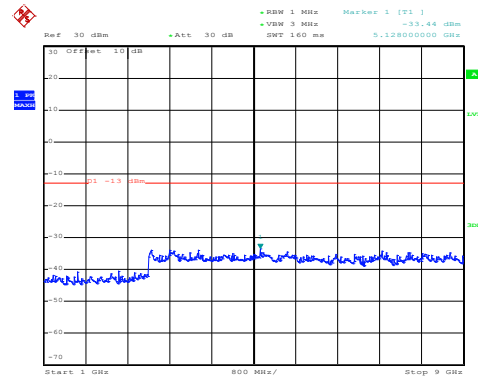
1GHz~9GHz

## LTE Band 5: 16 QAM & RB Size 1 BW: 10MHz Lowest channel



Date: 11.OCT.2019 14:51:18

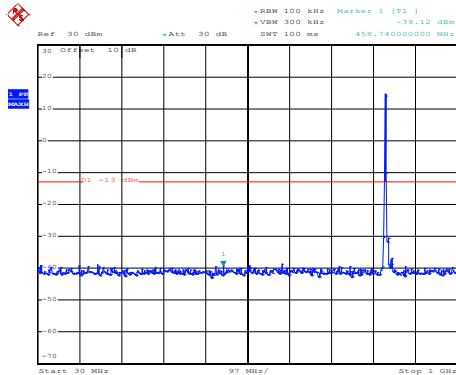
30MHz~1GHz



Date: 11.OCT.2019 14:54:50

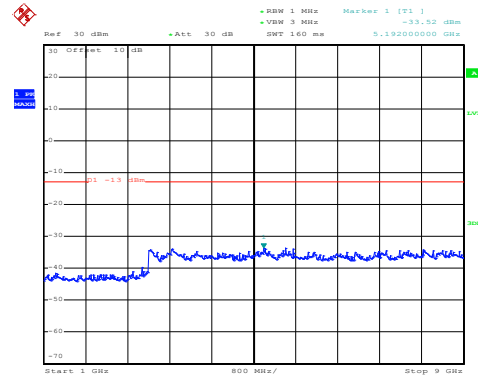
1GHz~9GHz

## Middle channel



Date: 11.OCT.2019 14:52:20

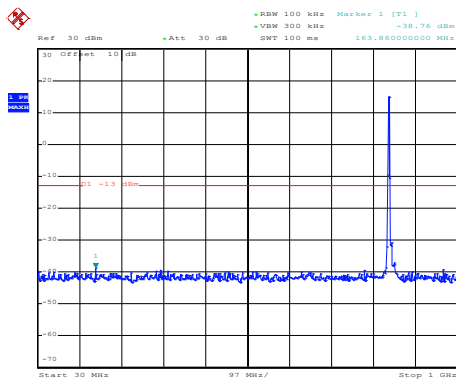
30MHz~1GHz



Date: 11.OCT.2019 14:54:27

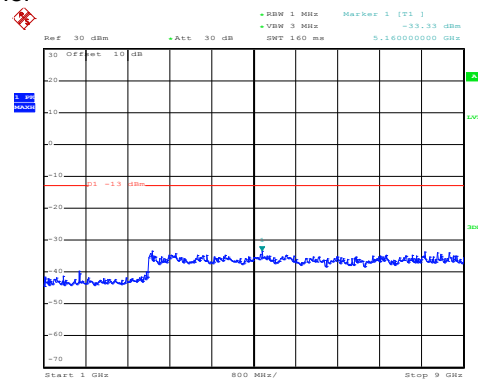
1GHz~9GHz

## High channel



Date: 11.OCT.2019 14:52:40

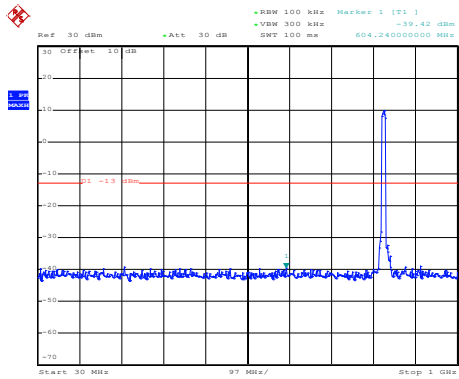
30MHz~1GHz



Date: 11.OCT.2019 14:53:29

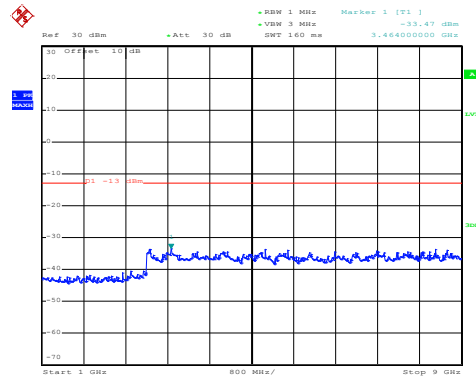
1GHz~9GHz

## LTE Band 5: 16 QAM & RB Size 50 BW: 10MHz Lowest channel



Date: 11.OCT.2019 14:51:37

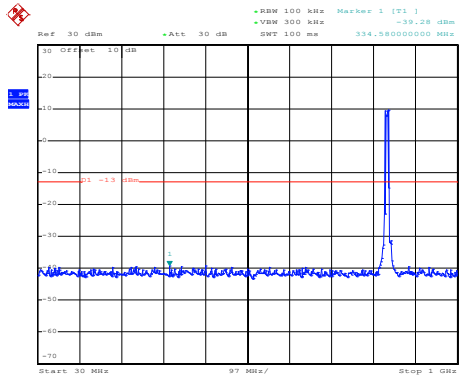
30MHz~1GHz



Date: 11.OCT.2019 14:55:04

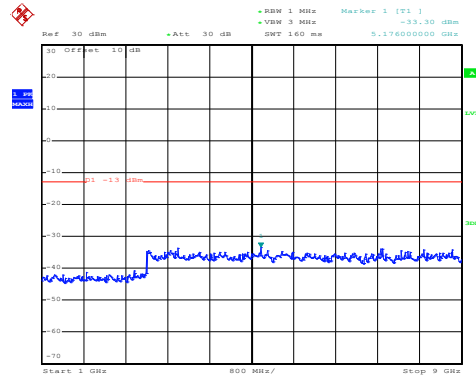
1GHz~9GHz

## Middle channel



Date: 11.OCT.2019 14:52:00

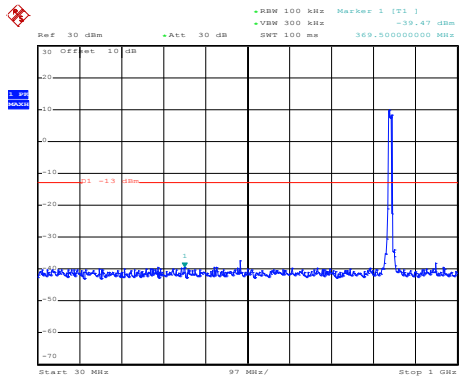
30MHz~1GHz



Date: 11.OCT.2019 14:54:12

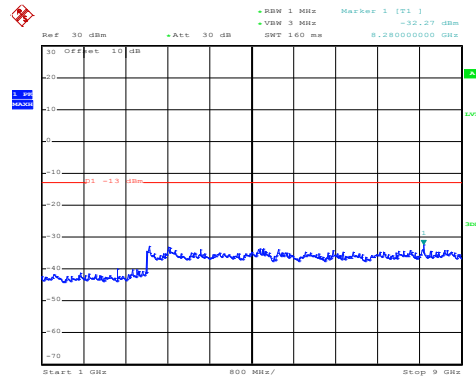
1GHz~9GHz

## High channel



Date: 11.OCT.2019 14:52:58

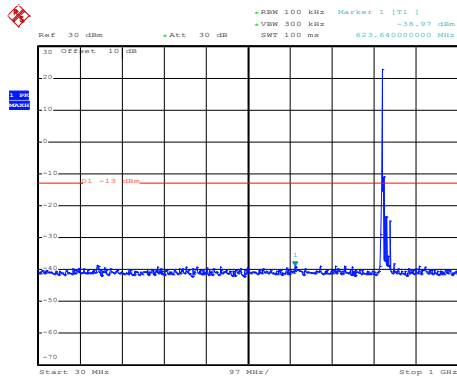
30MHz~1GHz



Date: 11.OCT.2019 14:53:53

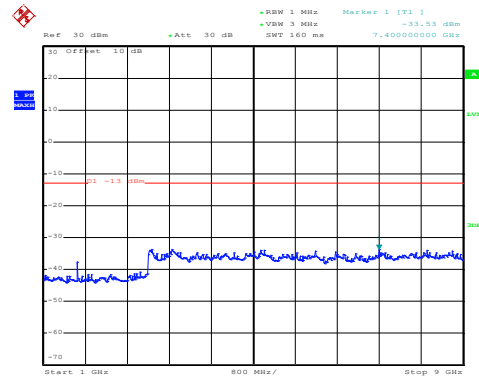
1GHz~9GHz

## LTE Band 5: QPSK & RB Size 1 BW: 10MHz Lowest channel



Date: 11.OCT.2019 14:51:12

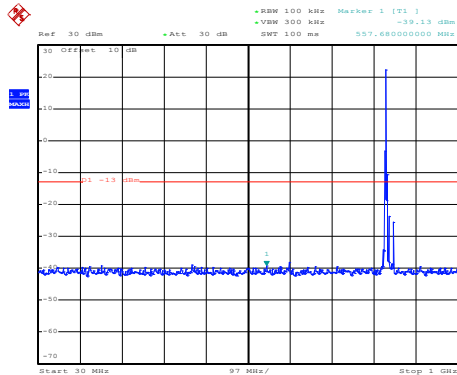
30MHz~1GHz



Date: 11.OCT.2019 14:54:45

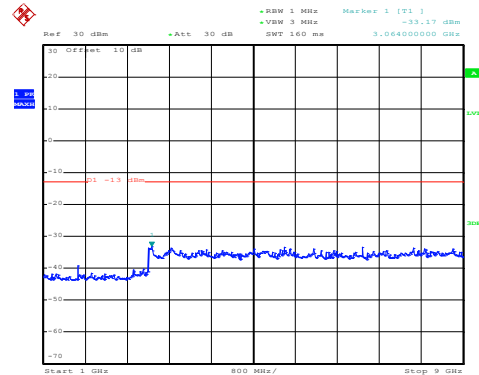
1GHz~9GHz

## Middle channel



Date: 11.OCT.2019 14:52:10

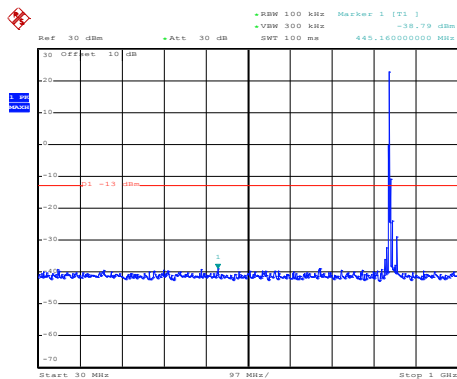
30MHz~1GHz



Date: 11.OCT.2019 14:54:21

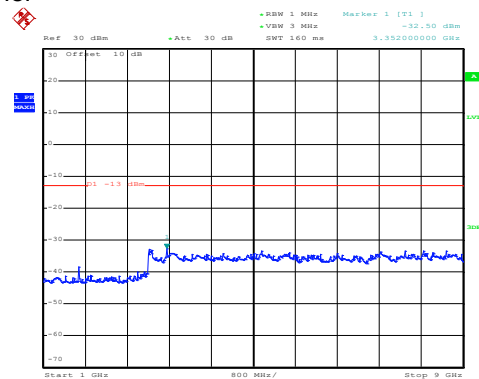
1GHz~9GHz

## High channel



Date: 11.OCT.2019 14:52:32

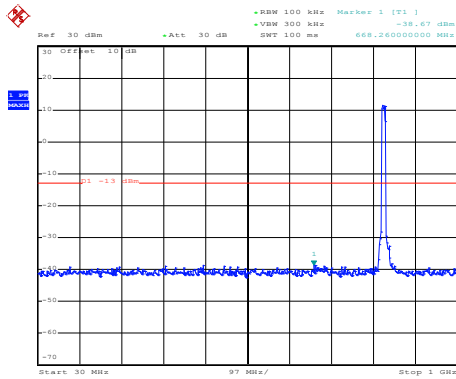
30MHz~1GHz



Date: 11.OCT.2019 14:53:23

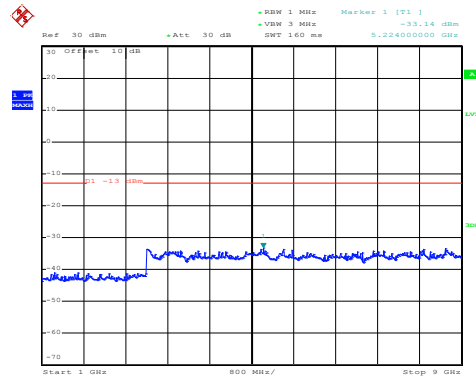
1GHz~9GHz

## LTE Band 5: QPSK & RB Size 50 BW: 10MHz Lowest channel



Date: 11.OCT.2019 14:51:30

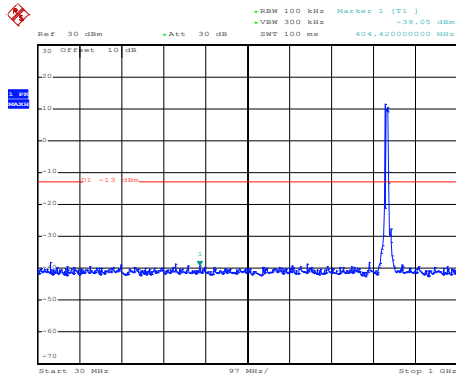
30MHz~1GHz



Date: 11.OCT.2019 14:54:59

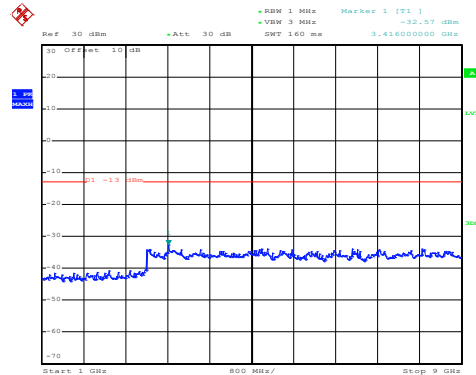
1GHz~9GHz

## Middle channel



Date: 11.OCT.2019 14:51:52

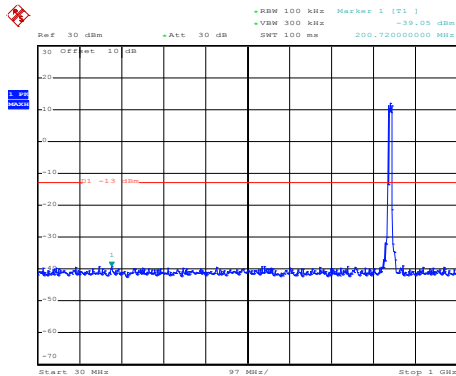
30MHz~1GHz



Date: 11.OCT.2019 14:54:07

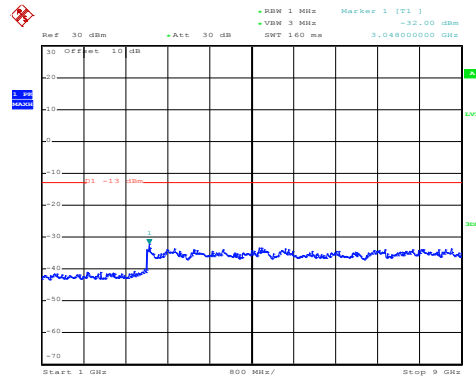
1GHz~9GHz

## High channel



Date: 11.OCT.2019 14:52:50

30MHz~1GHz



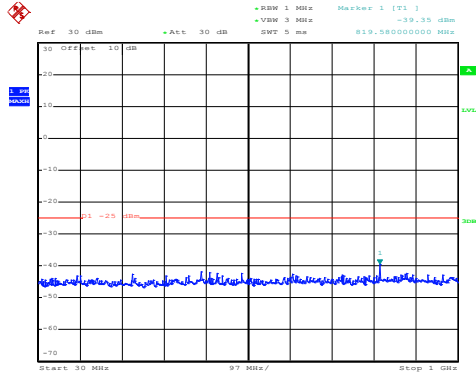
Date: 11.OCT.2019 14:53:44

1GHz~9GHz



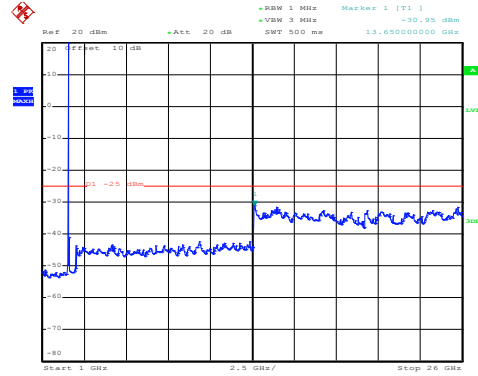
LTE Band 41 part:

LTE Band 41: 16 QAM & RB Size 1  
 BW: 5MHz  
 Lowest channel



Date: 11.OCT.2019 14:34:59

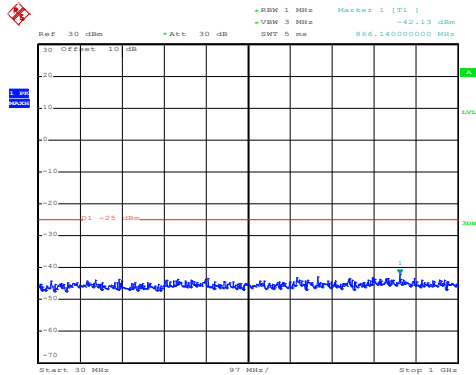
30MHz~1GHz



Date: 11.OCT.2019 14:31:20

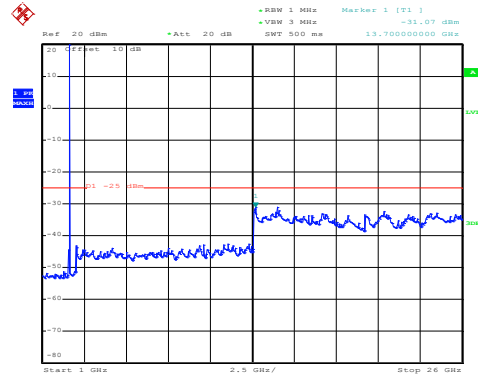
1GHz~26GHz

Middle channel



Date: 11.OCT.2019 14:34:42

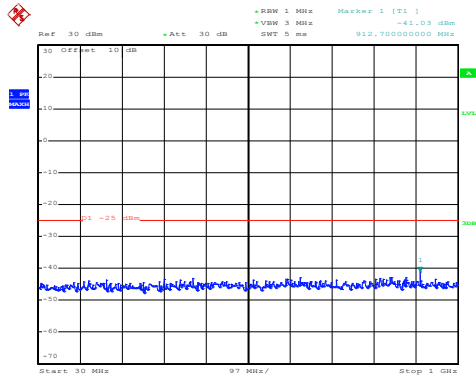
30MHz~1GHz



Date: 11.OCT.2019 14:32:25

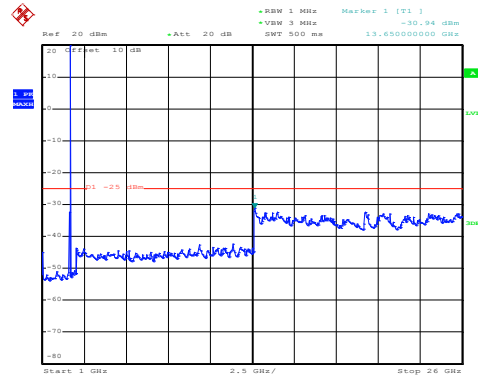
1GHz~26GHz

High channel



Date: 11.OCT.2019 14:34:01

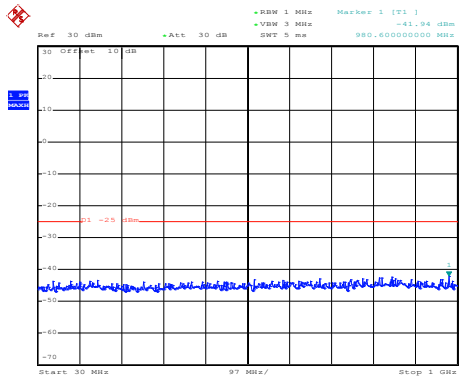
30MHz~1GHz



Date: 11.OCT.2019 14:32:52

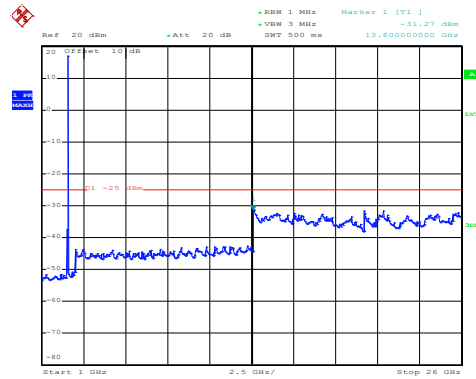
1GHz~26GHz

## LTE Band 41: 16 QAM & RB Size 25 BW: 5MHz Lowest channel



Date: 11.OCT.2019 14:35:11

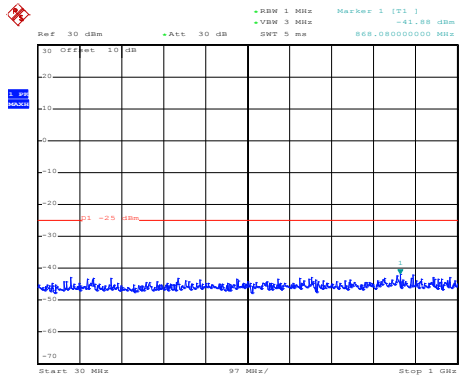
30MHz~1GHz



Date: 11.OCT.2019 14:31:40

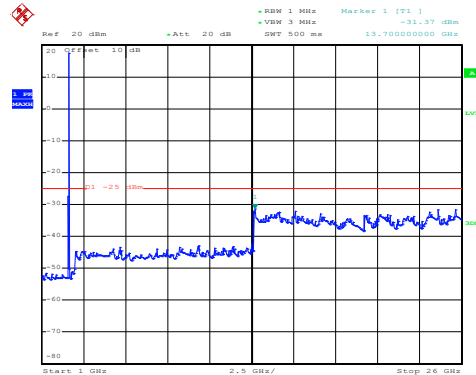
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:34:31

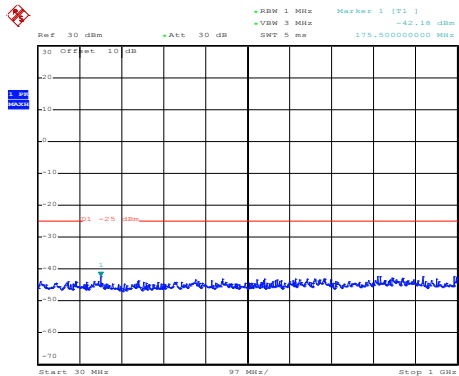
30MHz~1GHz



Date: 11.OCT.2019 14:32:04

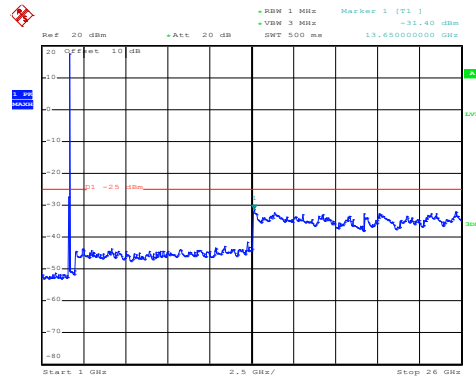
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:34:17

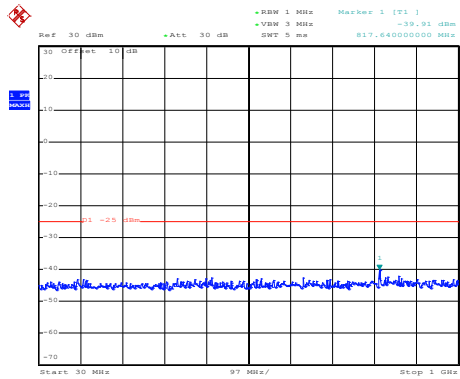
30MHz~1GHz



Date: 11.OCT.2019 14:33:09

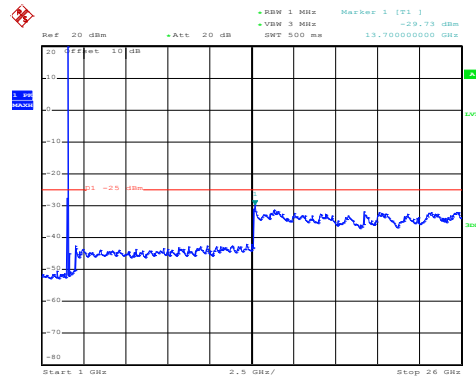
1GHz~26GHz

## LTE Band 41: QPSK & RB Size 1 BW: 5MHz Lowest channel



Date: 11.OCT.2019 14:34:54

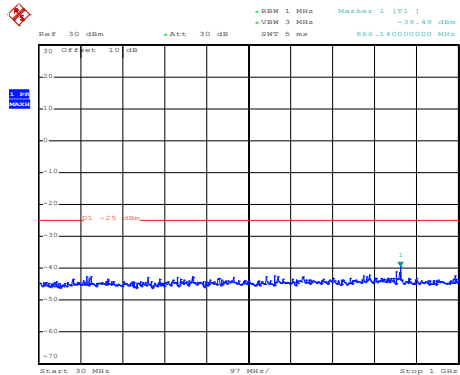
30MHz~1GHz



Date: 11.OCT.2019 14:31:12

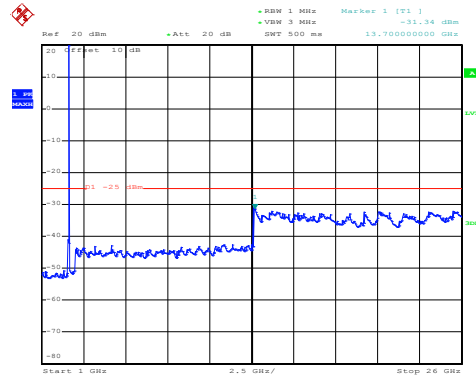
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:34:38

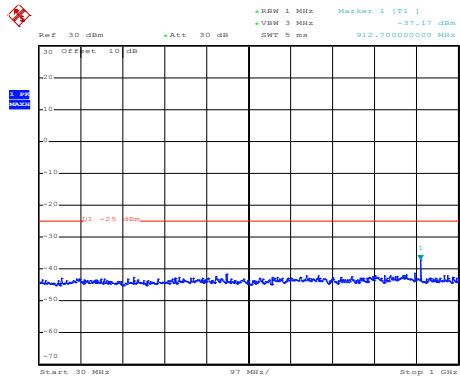
30MHz~1GHz



Date: 11.OCT.2019 14:32:20

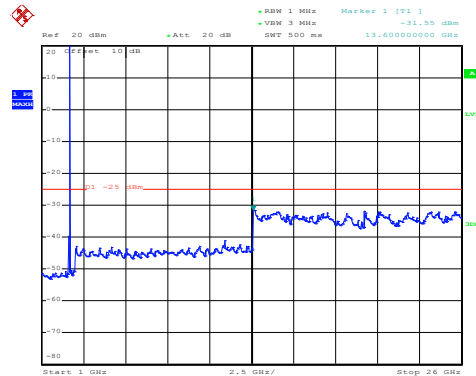
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:33:57

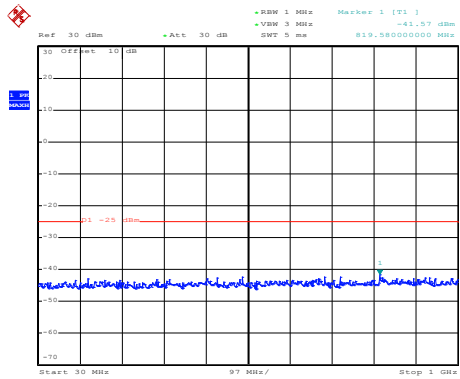
30MHz~1GHz



Date: 11.OCT.2019 14:32:46

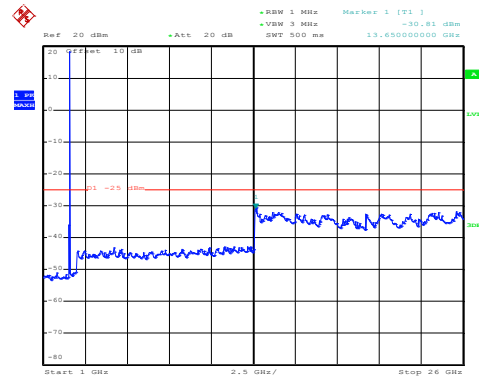
1GHz~26GHz

## LTE Band 41: QPSK & RB Size 25 BW: 5MHz Lowest channel



Date: 11.OCT.2019 14:35:06

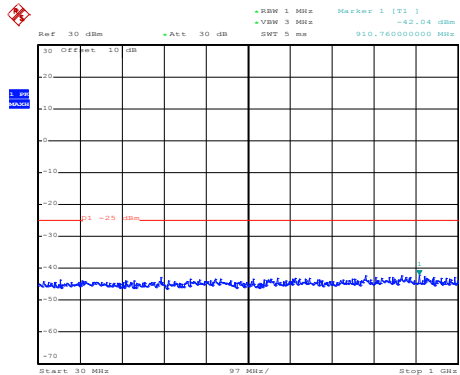
30MHz~1GHz



Date: 11.OCT.2019 14:31:31

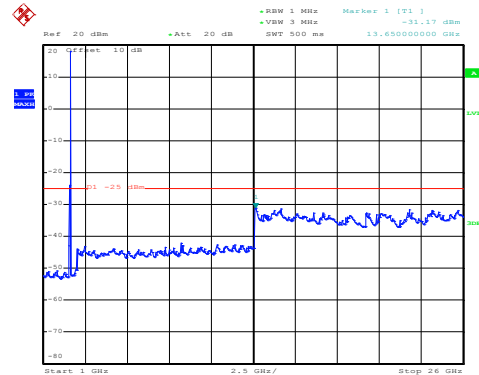
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:34:27

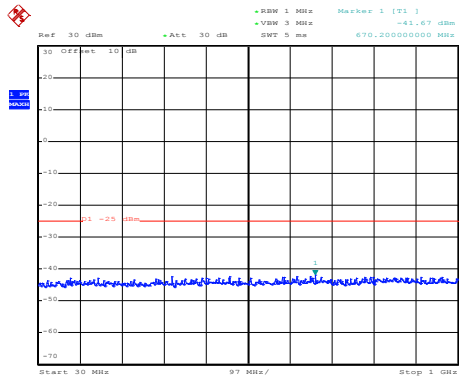
30MHz~1GHz



Date: 11.OCT.2019 14:31:58

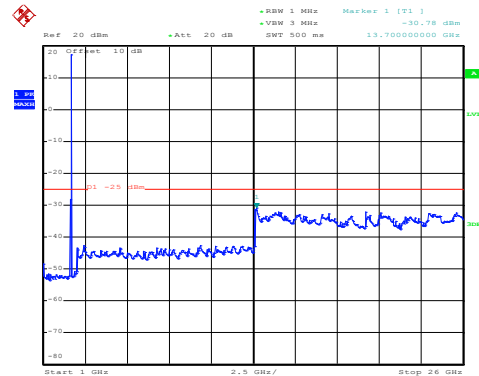
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:34:12

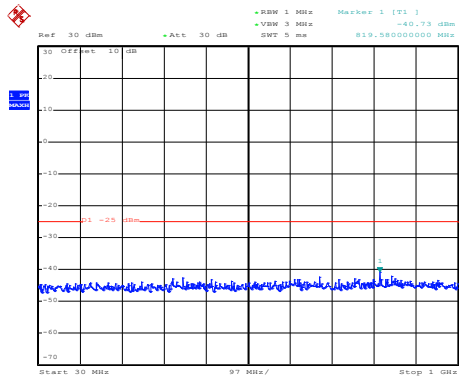
30MHz~1GHz



Date: 11.OCT.2019 14:33:01

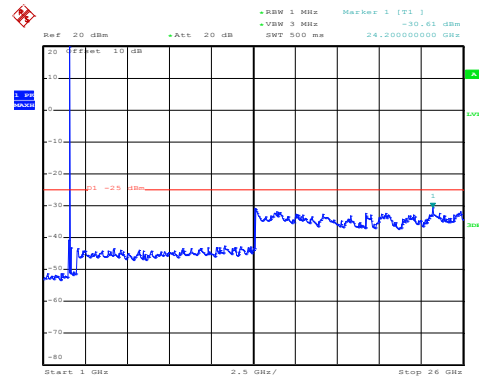
1GHz~26GHz

## LTE Band 41: 16 QAM & RB Size 1 BW: 10MHz Lowest channel



Date: 11.OCT.2019 14:35:36

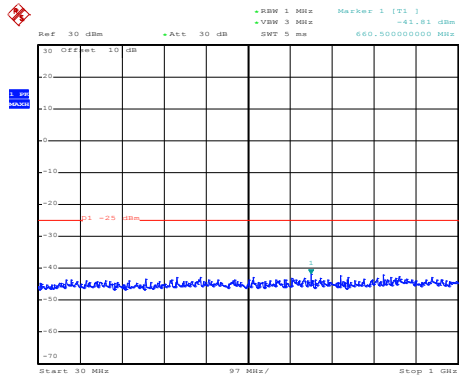
30MHz~1GHz



Date: 11.OCT.2019 14:28:20

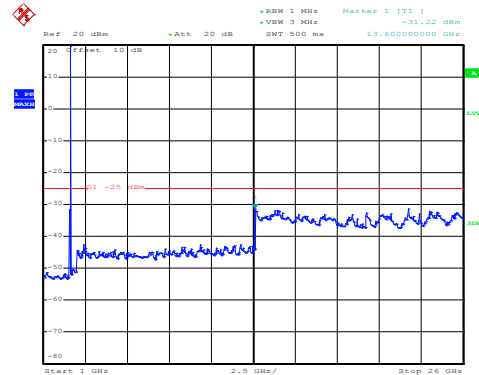
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:37:02

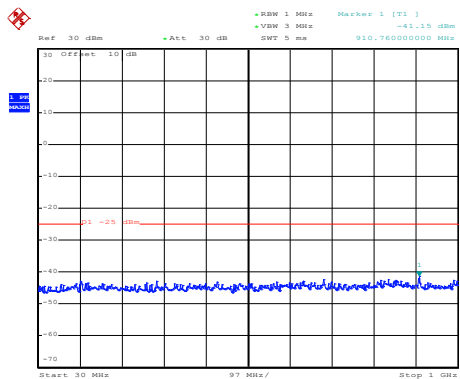
30MHz~1GHz



Date: 11.OCT.2019 14:29:40

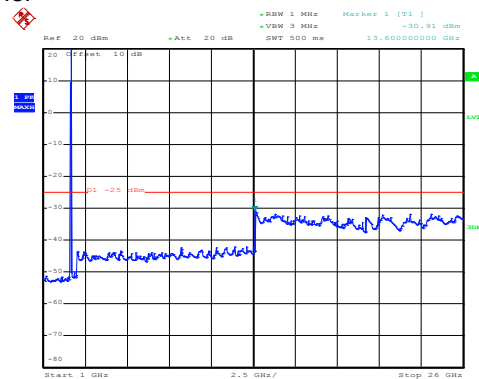
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:37:26

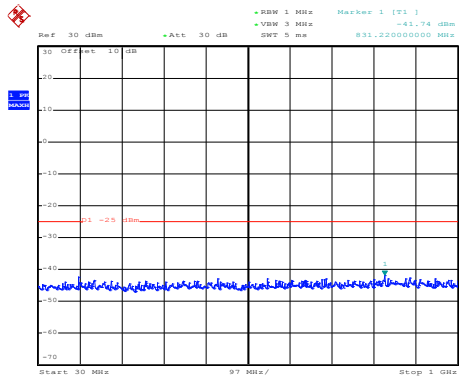
30MHz~1GHz



Date: 11.OCT.2019 14:30:11

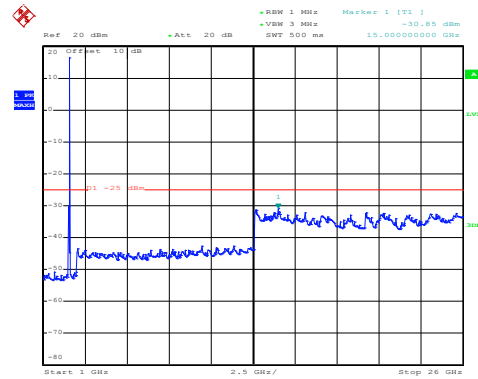
1GHz~26GHz

## LTE Band 41: 16 QAM & RB Size 50 BW: 10MHz Lowest channel



Date: 11.OCT.2019 14:35:49

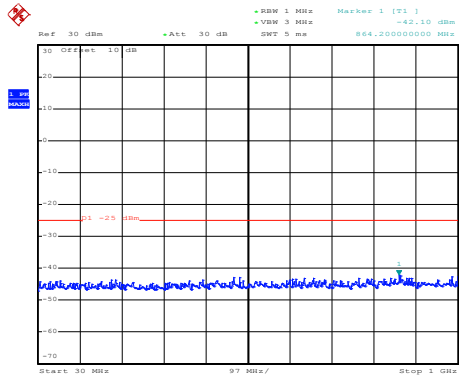
30MHz~1GHz



Date: 11.OCT.2019 14:28:40

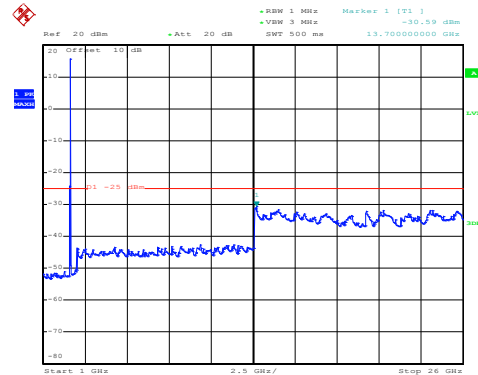
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:36:49

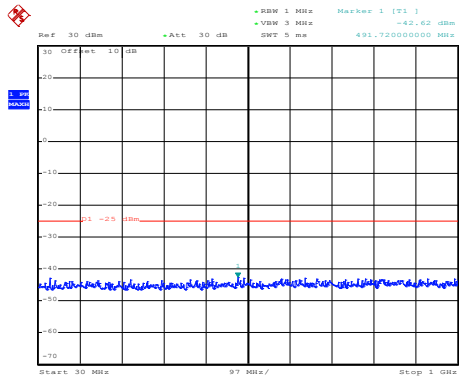
30MHz~1GHz



Date: 11.OCT.2019 14:29:07

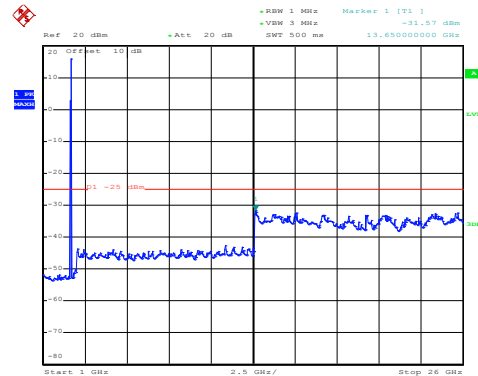
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:37:39

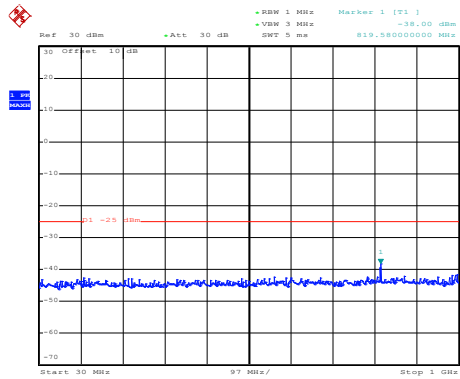
30MHz~1GHz



Date: 11.OCT.2019 14:30:32

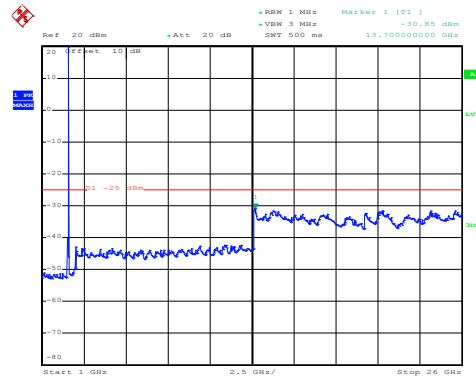
1GHz~26GHz

## LTE Band 41: QPSK & RB Size 1 BW: 10MHz Lowest channel



Date: 11.OCT.2019 14:35:32

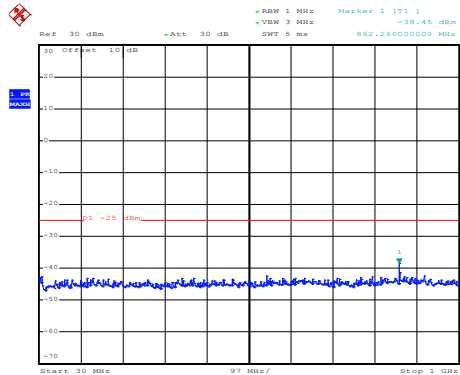
30MHz~1GHz



Date: 11.OCT.2019 14:28:08

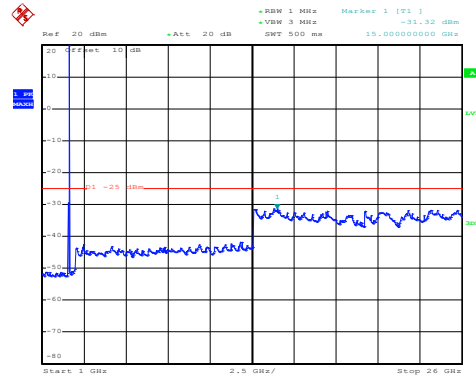
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:37:09

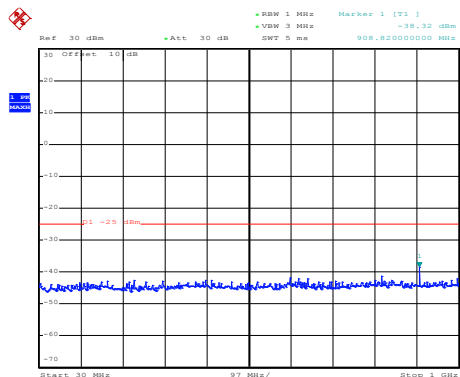
30MHz~1GHz



Date: 11.OCT.2019 14:29:32

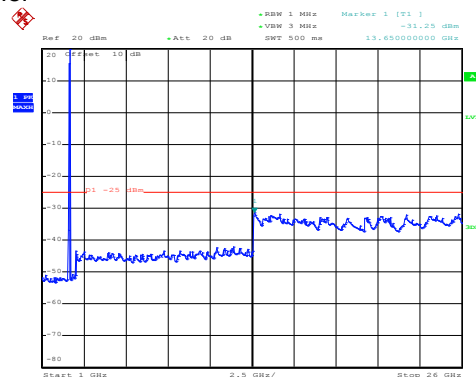
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:37:20

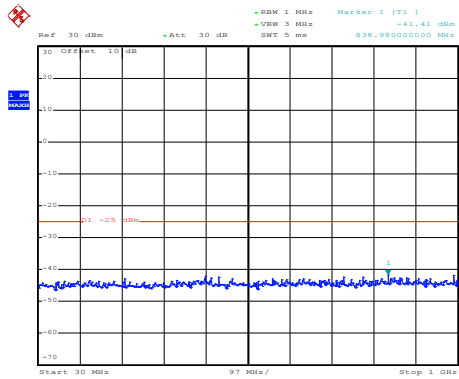
30MHz~1GHz



Date: 11.OCT.2019 14:29:56

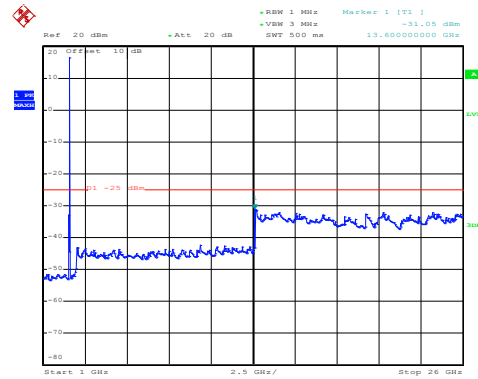
1GHz~26GHz

## LTE Band 41: QPSK & RB Size 50 BW: 10MHz Lowest channel



Date: 11.OCT.2019 14:35:44

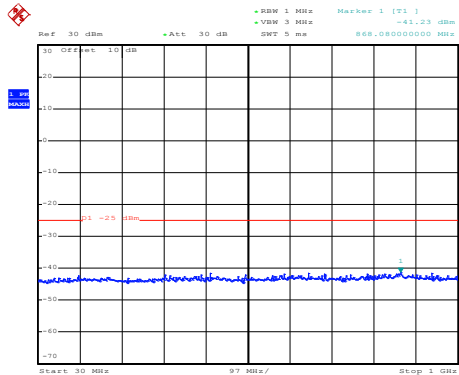
30MHz~1GHz



Date: 11.OCT.2019 14:28:31

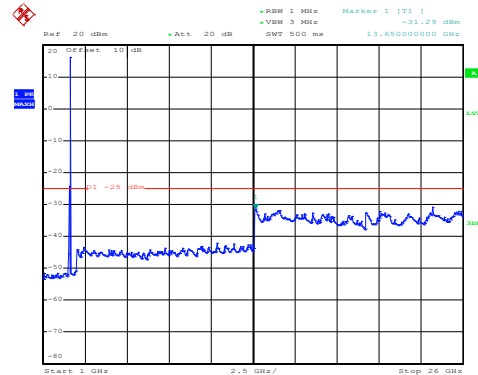
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:36:44

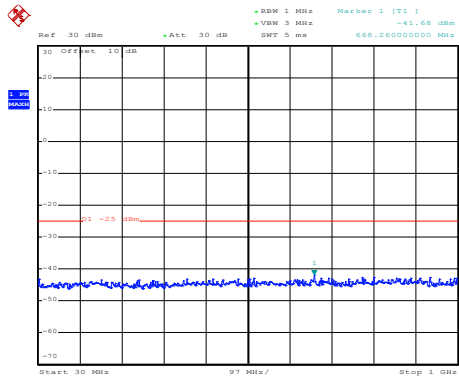
30MHz~1GHz



Date: 11.OCT.2019 14:28:53

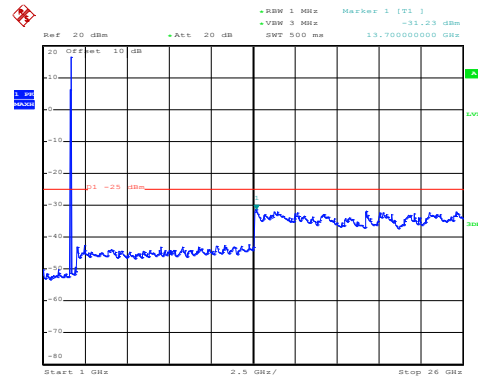
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:37:34

30MHz~1GHz

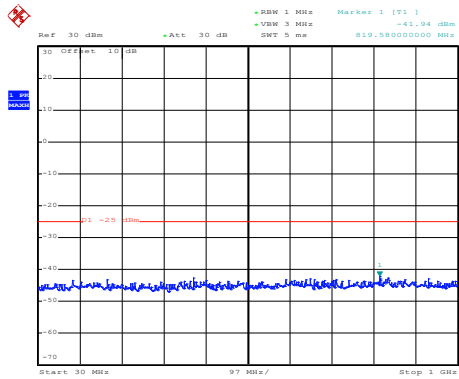


Date: 11.OCT.2019 14:30:24

1GHz~26GHz

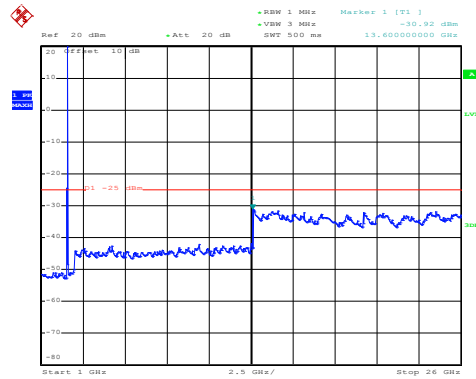


## LTE Band 41: 16 QAM & RB Size 1 BW: 15MHz Lowest channel



Date: 11.OCT.2019 14:38:06

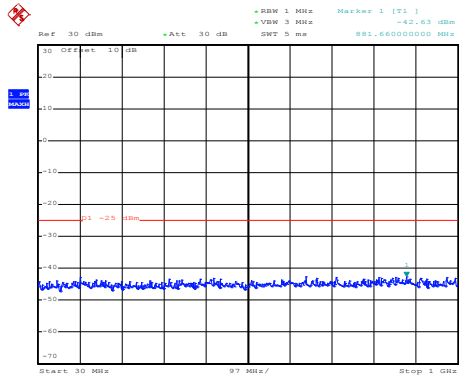
30MHz~1GHz



Date: 11.OCT.2019 14:25:33

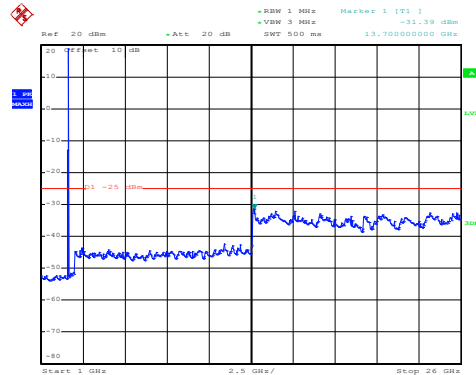
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:38:44

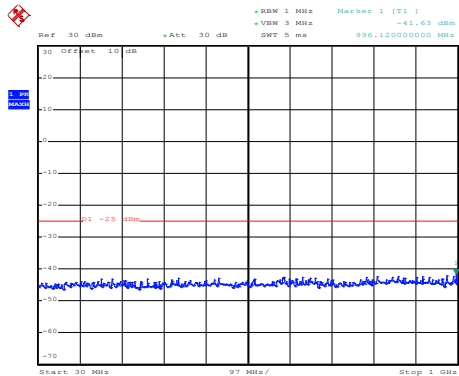
30MHz~1GHz



Date: 11.OCT.2019 14:26:42

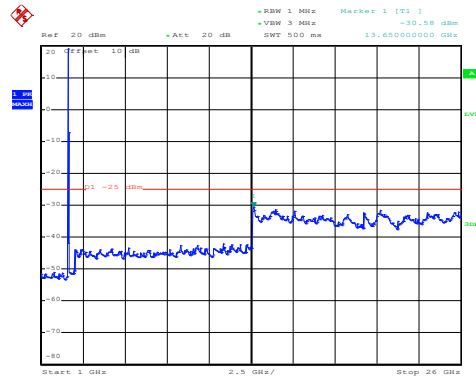
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:39:01

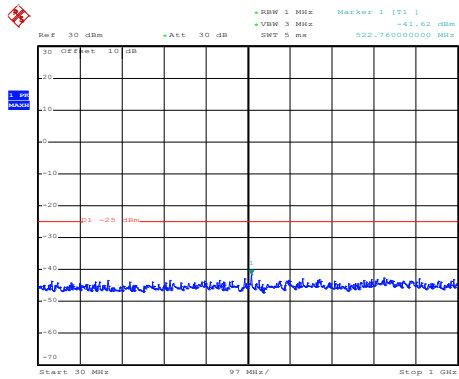
30MHz~1GHz



Date: 11.OCT.2019 14:27:09

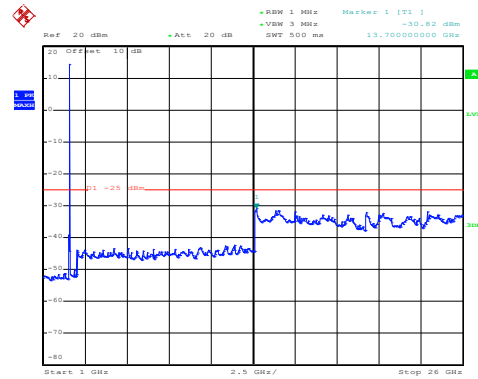
1GHz~26GHz

## LTE Band 41: 16 QAM & RB Size 75 BW: 15MHz Lowest channel



Date: 11.OCT.2019 14:38:17

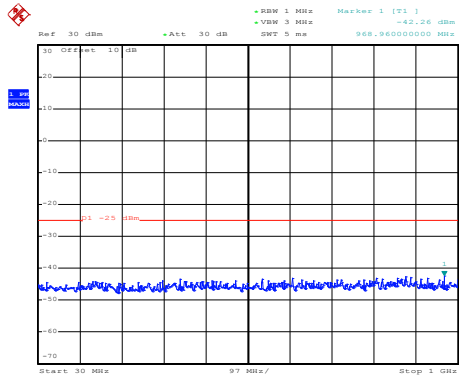
30MHz~1GHz



Date: 11.OCT.2019 14:25:55

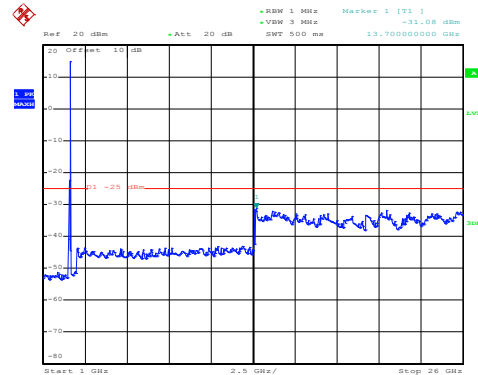
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:38:31

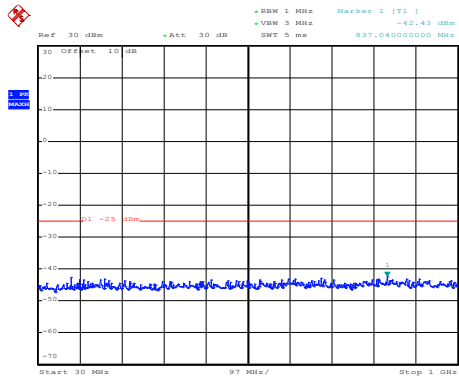
30MHz~1GHz



Date: 11.OCT.2019 14:26:20

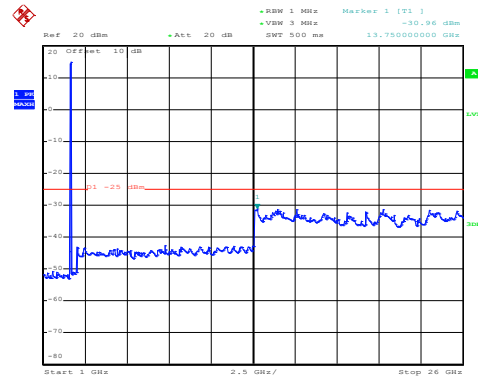
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:39:16

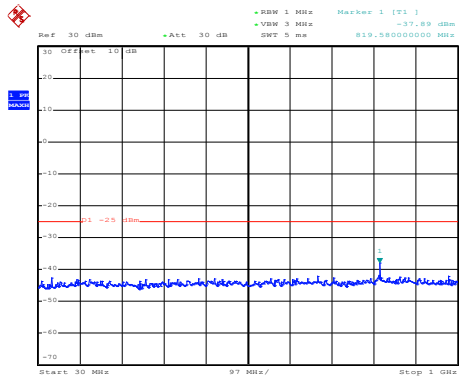
30MHz~1GHz



Date: 11.OCT.2019 14:27:36

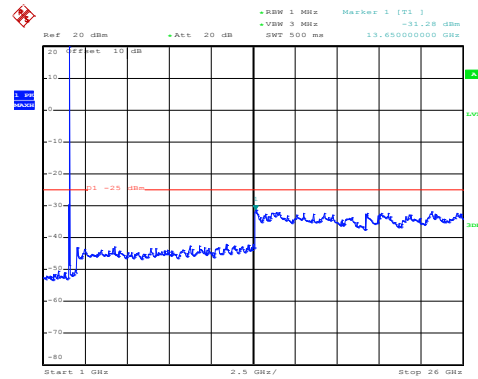
1GHz~26GHz

## LTE Band 41: QPSK & RB Size 1 BW: 15MHz Lowest channel



Date: 11.OCT.2019 14:38:01

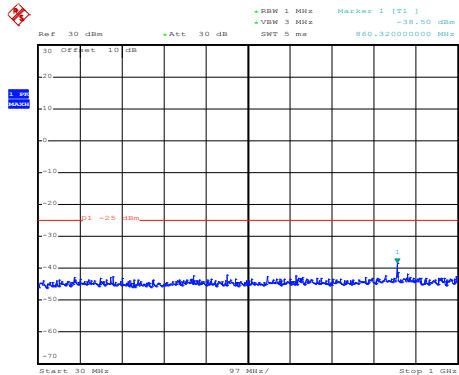
30MHz~1GHz



Date: 11.OCT.2019 14:25:09

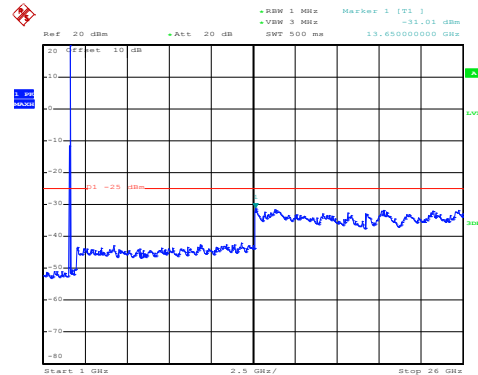
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:38:39

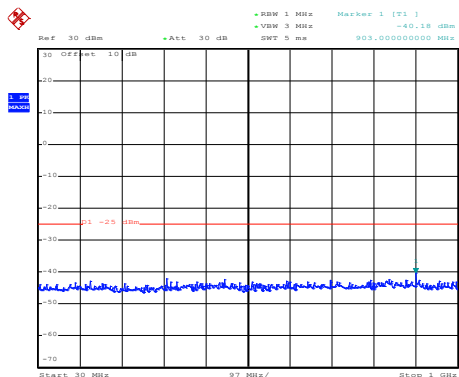
30MHz~1GHz



Date: 11.OCT.2019 14:26:37

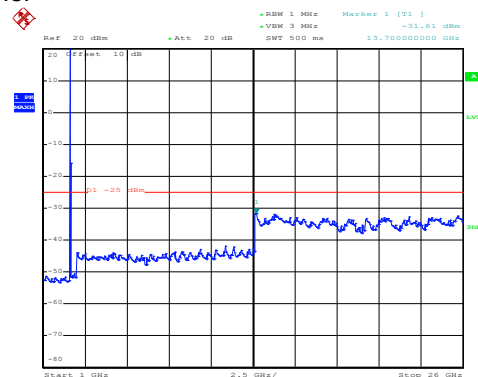
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:38:54

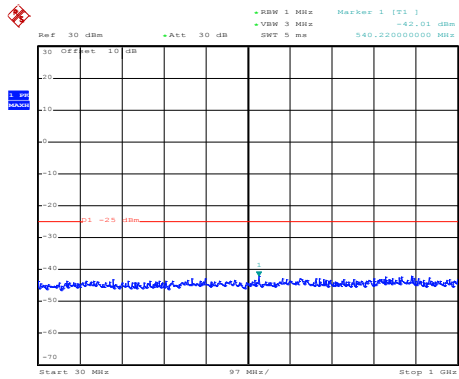
30MHz~1GHz



Date: 11.OCT.2019 14:26:57

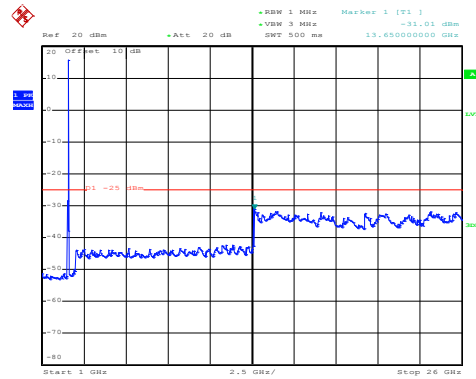
1GHz~26GHz

## LTE Band 41: QPSK & RB Size 75 BW: 15MHz Lowest channel



Date: 11.OCT.2019 14:38:13

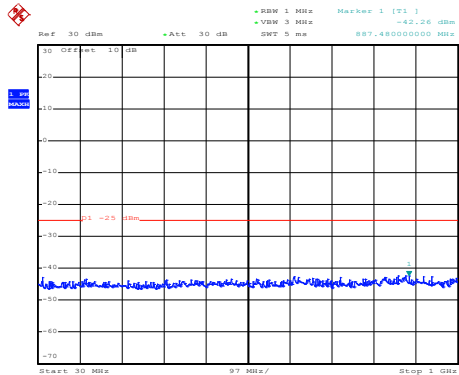
30MHz~1GHz



Date: 11.OCT.2019 14:25:46

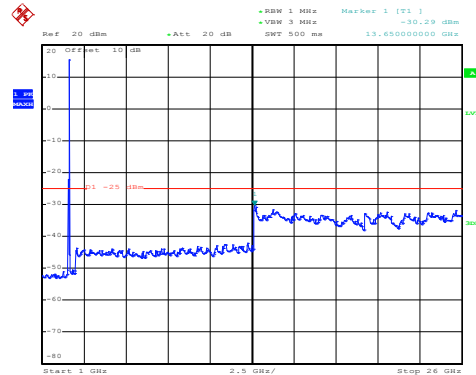
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:38:27

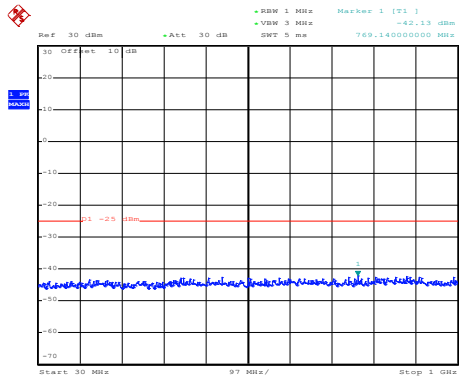
30MHz~1GHz



Date: 11.OCT.2019 14:26:13

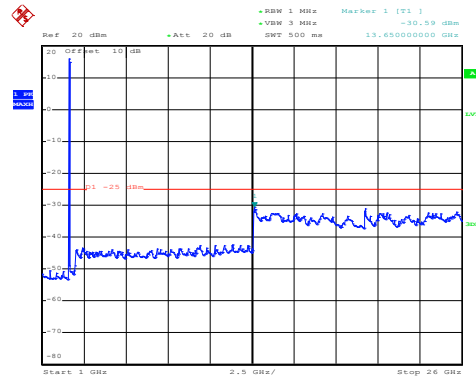
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:39:11

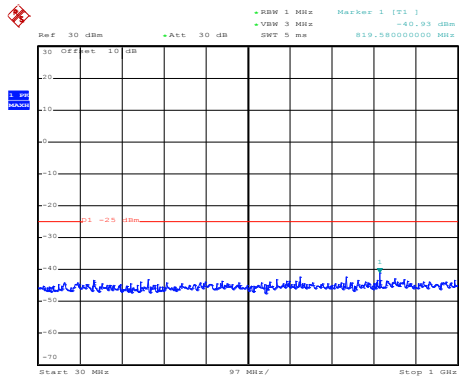
30MHz~1GHz



Date: 11.OCT.2019 14:27:20

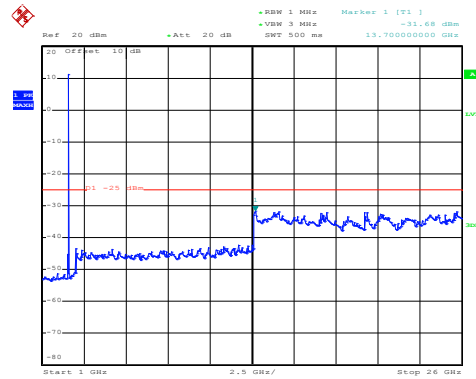
1GHz~26GHz

## LTE Band 41: 16 QAM & RB Size 1 BW: 20MHz Lowest channel



Date: 11.OCT.2019 14:39:48

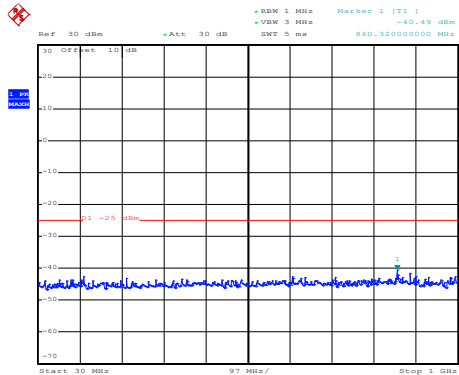
30MHz~1GHz



Date: 11.OCT.2019 14:24:22

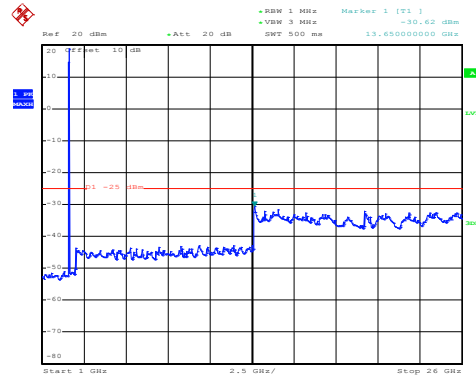
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:40:27

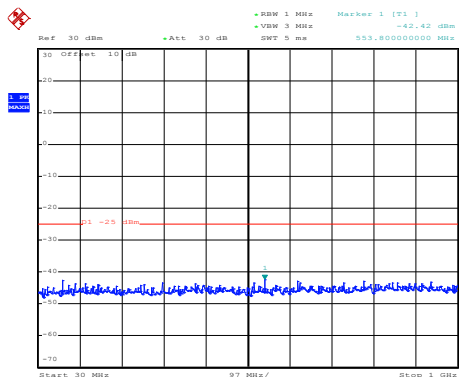
30MHz~1GHz



Date: 11.OCT.2019 14:24:01

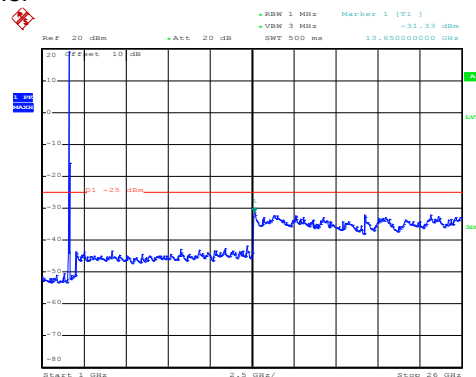
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:40:41

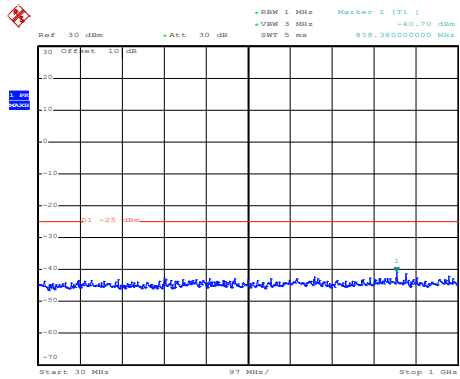
30MHz~1GHz



Date: 11.OCT.2019 14:22:38

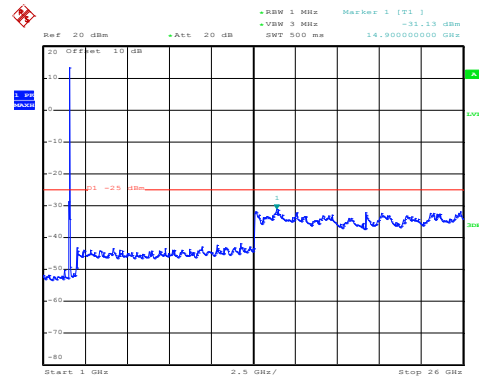
1GHz~26GHz

## LTE Band 41: 16 QAM & RB Size 100 BW: 20MHz Lowest channel



Date: 11.OCT.2019 14:40:02

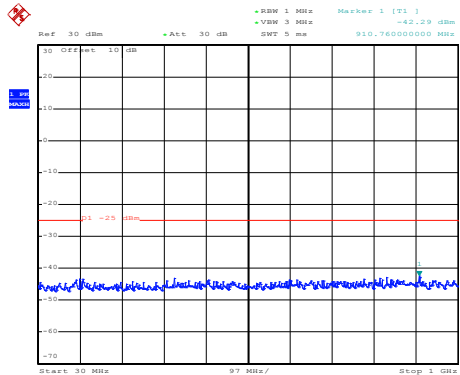
30MHz~1GHz



Date: 11.OCT.2019 14:24:43

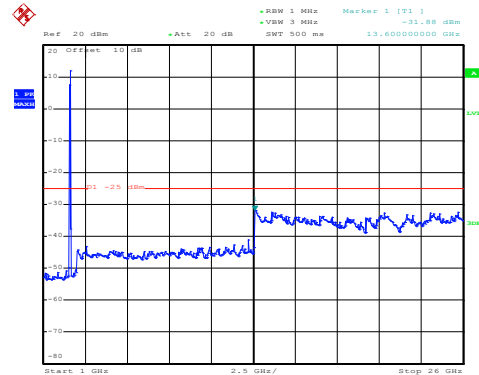
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:40:15

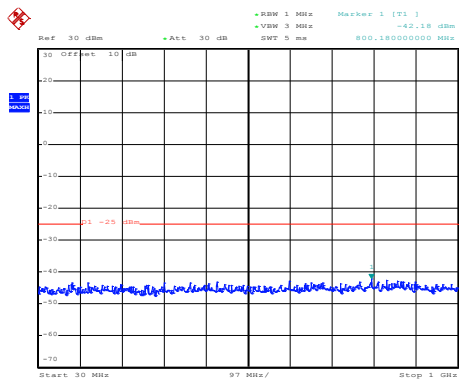
30MHz~1GHz



Date: 11.OCT.2019 14:23:33

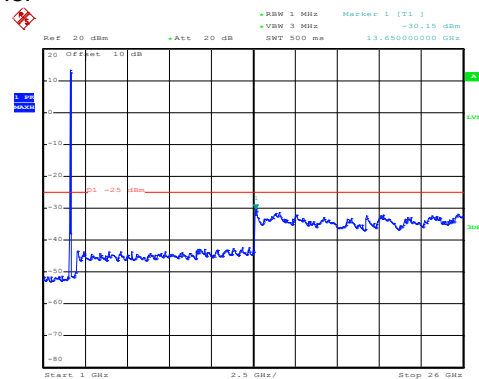
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:40:55

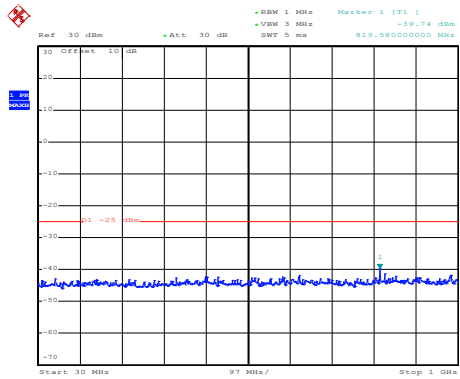
30MHz~1GHz



Date: 11.OCT.2019 14:23:09

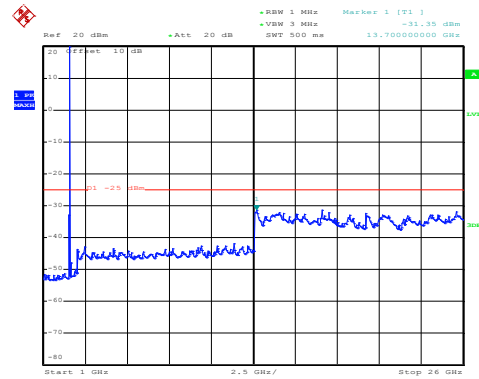
1GHz~26GHz

## LTE Band 41: QPSK & RB Size 1 BW: 20MHz Lowest channel



Date: 11.OCT.2019 14:39:44

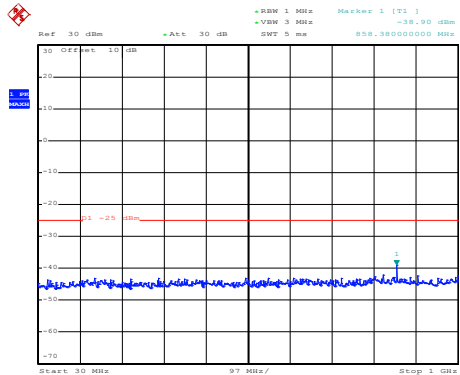
30MHz~1GHz



Date: 11.OCT.2019 14:24:15

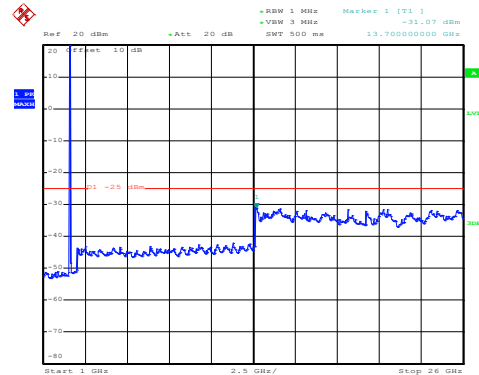
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:40:22

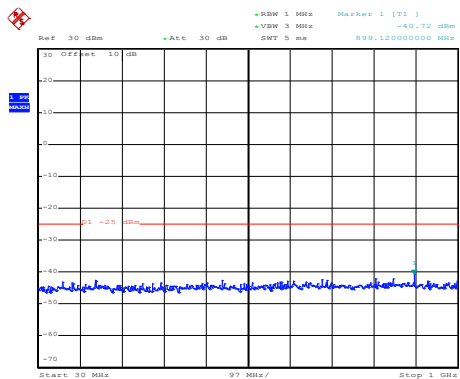
30MHz~1GHz



Date: 11.OCT.2019 14:23:52

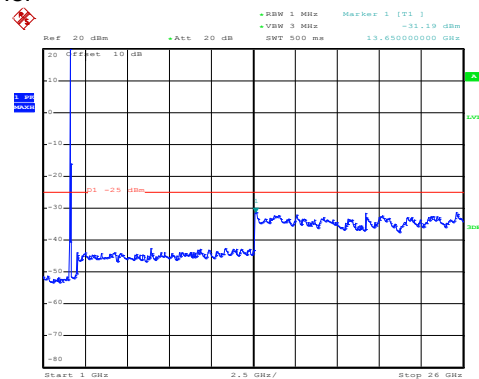
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:40:36

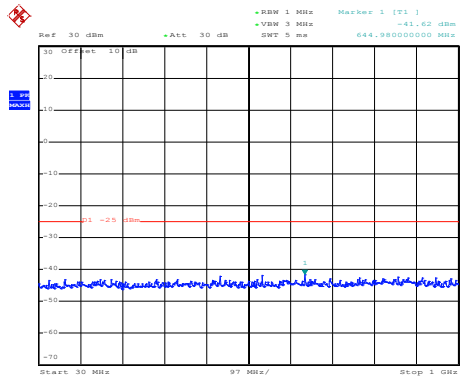
30MHz~1GHz



Date: 11.OCT.2019 14:22:28

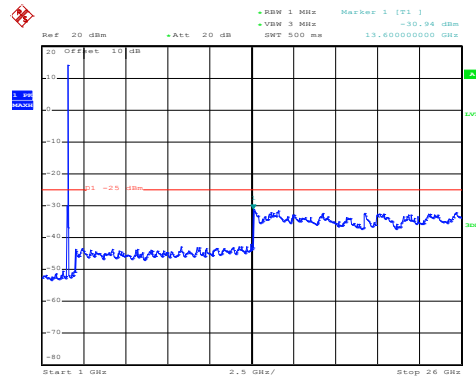
1GHz~26GHz

## LTE Band 41: QPSK & RB Size 100 BW: 20MHz Lowest channel



Date: 11.OCT.2019 14:39:55

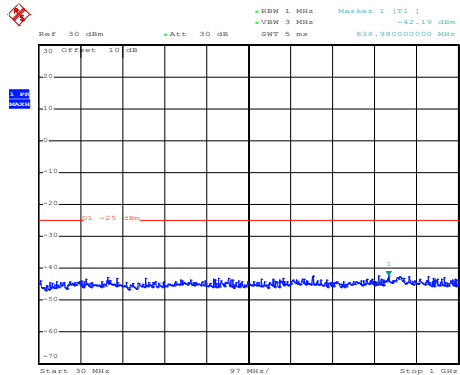
30MHz~1GHz



Date: 11.OCT.2019 14:24:32

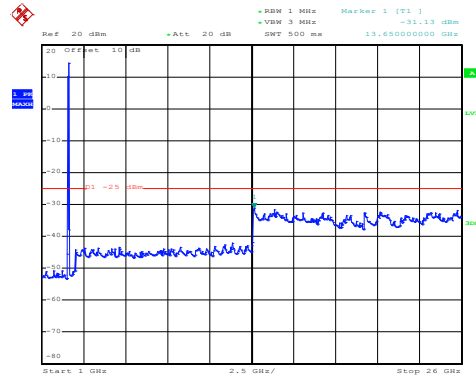
1GHz~26GHz

## Middle channel



Date: 11.OCT.2019 14:40:11

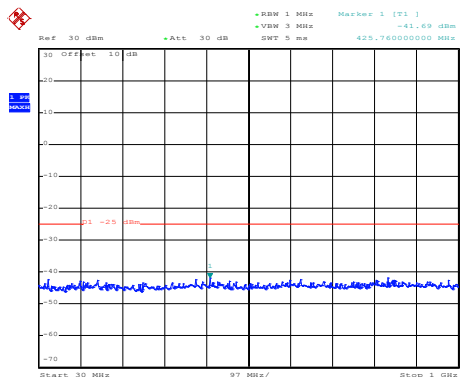
30MHz~1GHz



Date: 11.OCT.2019 14:23:28

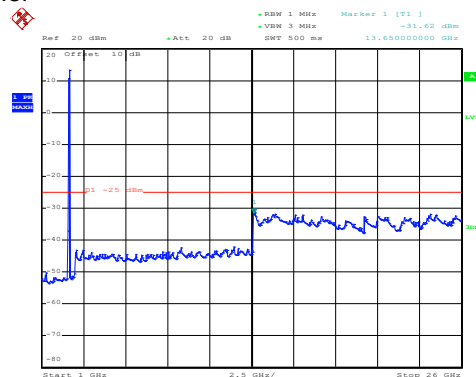
1GHz~26GHz

## High channel



Date: 11.OCT.2019 14:40:51

30MHz~1GHz



Date: 11.OCT.2019 14:22:50

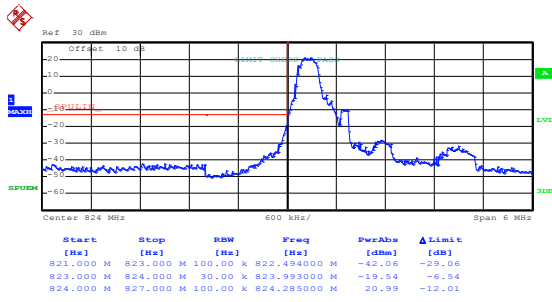
1GHz~26GHz



**Band edge emission:**

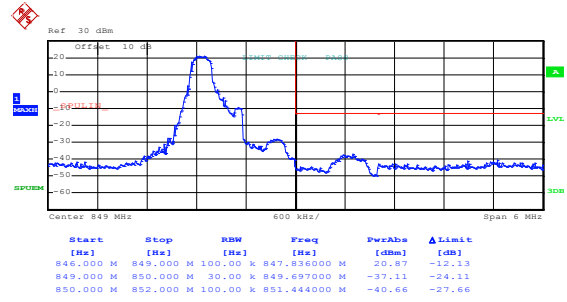
**LTE Band 5 part:**

LTE Band 5, BW: 1.4MHz  
16QAM & RB Size 1



Date: 11.OCT.2019 15:01:13

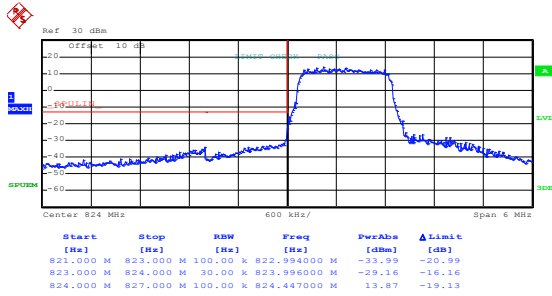
Lowest channel



Date: 11.OCT.2019 15:02:02

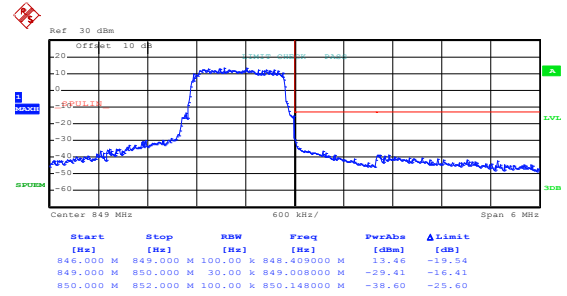
Highest channel

16QAM & RB Size 6



Date: 11.OCT.2019 15:01:29

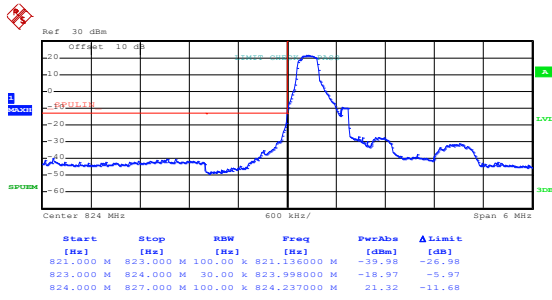
Lowest channel



Date: 11.OCT.2019 15:01:45

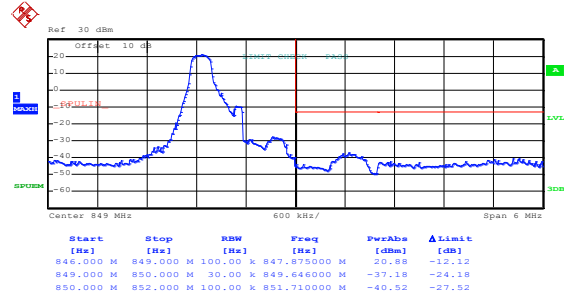
Highest channel

## LTE Band 5, BW: 1.4MHz QPSK & RB Size 1



Date: 11.OCT.2019 15:01:08

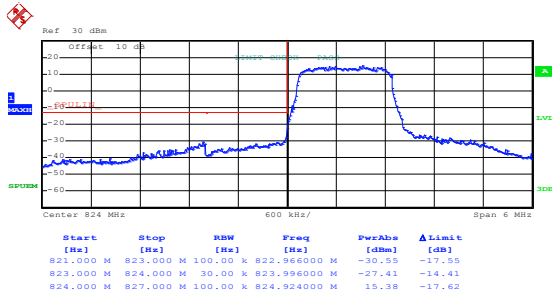
Lowest channel



Date: 11.OCT.2019 15:01:54

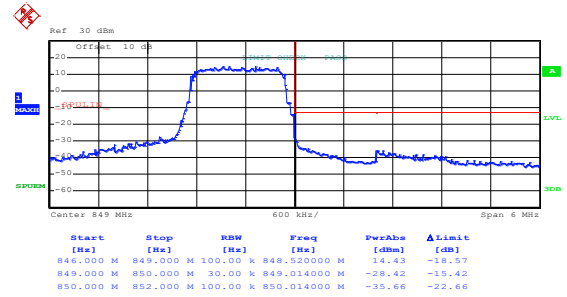
Highest channel

## QPSK & RB Size 6



Date: 11.OCT.2019 15:01:22

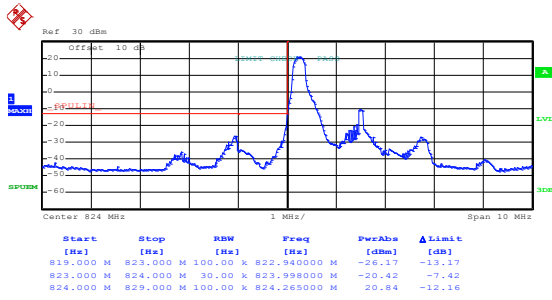
Lowest channel



Date: 11.OCT.2019 15:01:41

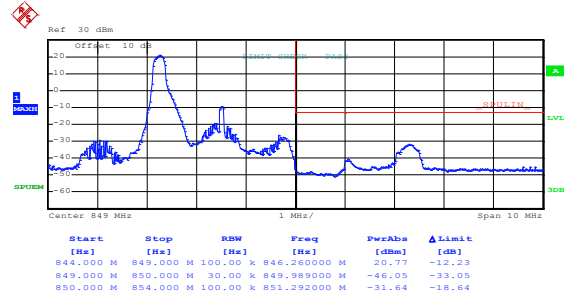
Highest channel

## LTE Band 5, BW: 3MHz 16QAM & RB Size 1



Date: 11.OCT.2019 15:03:51

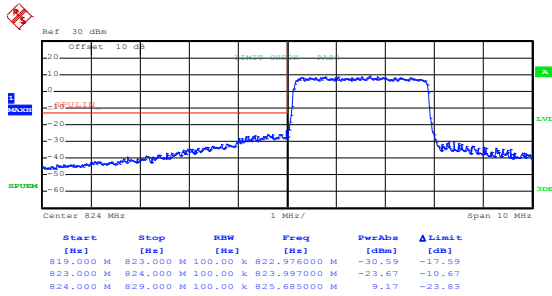
Lowest channel



Date: 11.OCT.2019 15:02:35

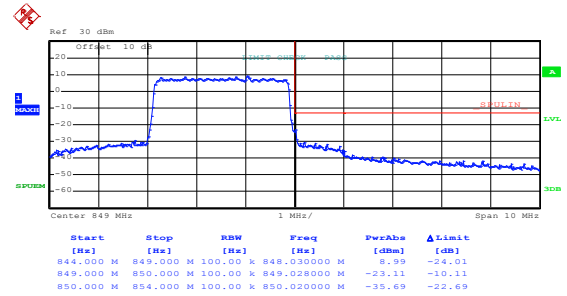
Highest channel

## 16QAM & RB Size 15



Date: 11.OCT.2019 15:03:21

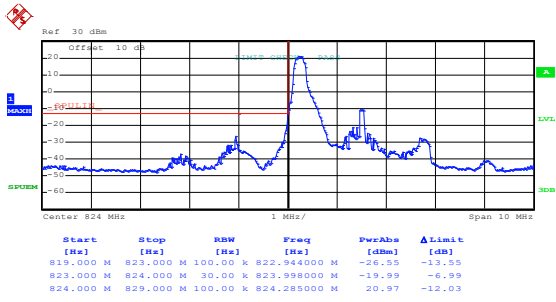
Lowest channel



Date: 11.OCT.2019 15:02:56

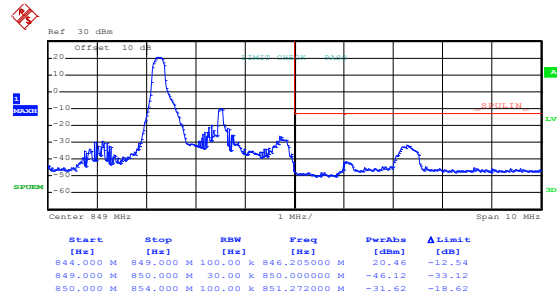
Highest channel

## LTE Band 5, BW: 3MHz QPSK & RB Size 1



Date: 11.OCT.2019 15:03:36

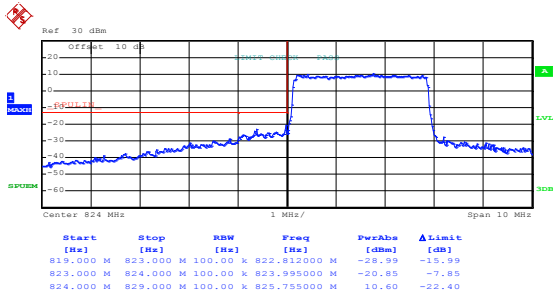
Lowest channel



Date: 11.OCT.2019 15:02:24

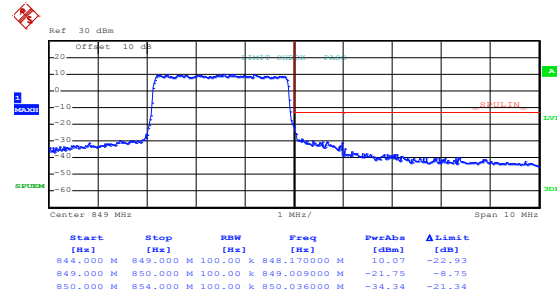
Highest channel

## QPSK & RB Size 15



Date: 11.OCT.2019 15:03:15

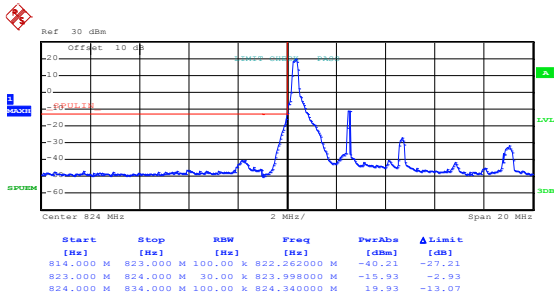
Lowest channel



Date: 11.OCT.2019 15:02:50

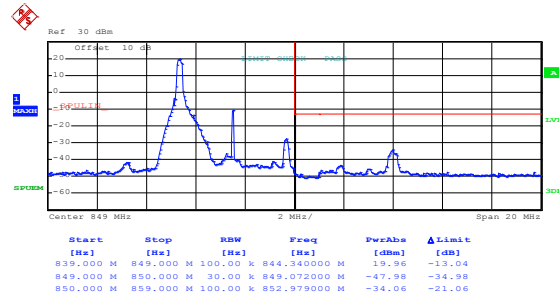
Highest channel

## LTE Band 5, BW: 5MHz 16QAM & RB Size 1



Date: 11.OCT.2019 15:04:16

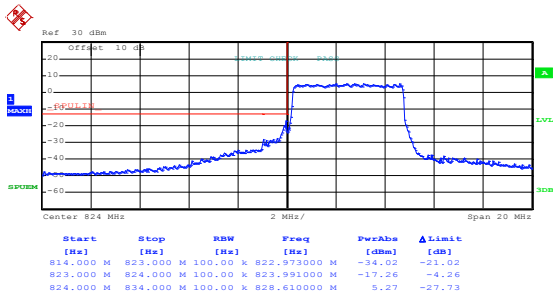
Lowest channel



Date: 11.OCT.2019 15:05:16

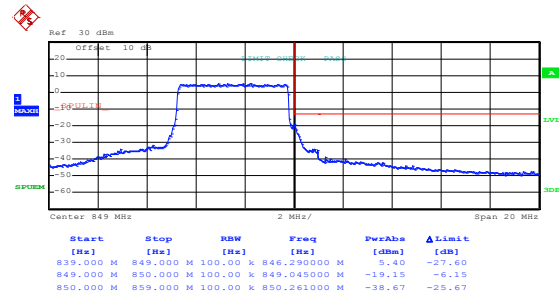
Highest channel

## 16QAM & RB Size 25



Date: 11.OCT.2019 15:04:37

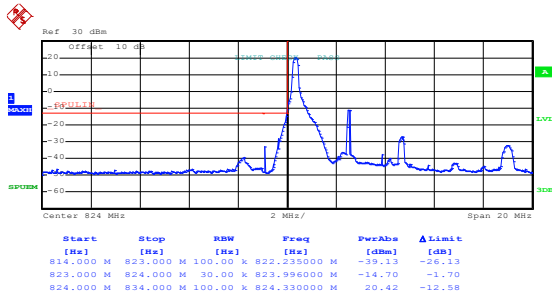
Lowest channel



Date: 11.OCT.2019 15:04:58

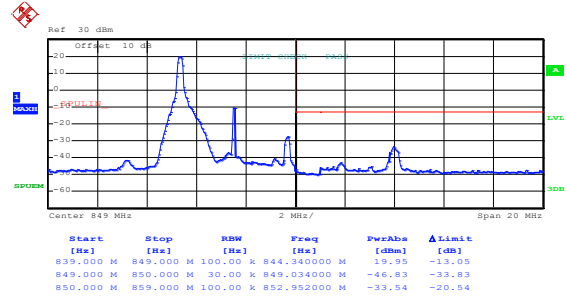
Highest channel

## LTE Band 5, BW: 5MHz QPSK & RB Size 1



Date: 11.OCT.2019 15:04:09

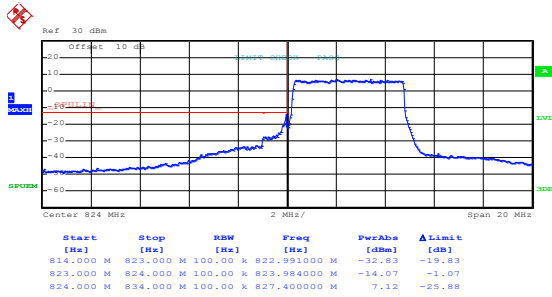
Lowest channel



Date: 11.OCT.2019 15:05:11

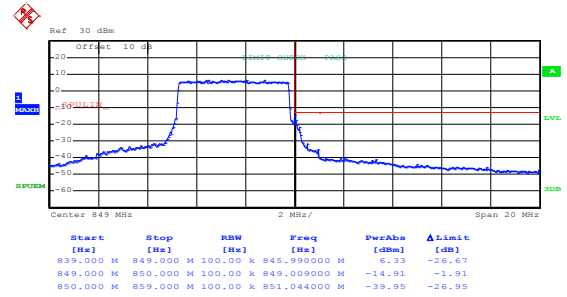
Highest channel

## QPSK & RB Size 25



Date: 11.OCT.2019 15:04:31

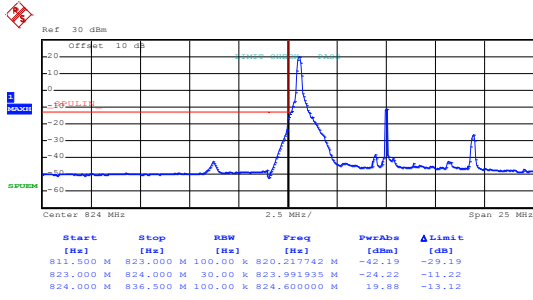
Lowest channel



Date: 11.OCT.2019 15:04:51

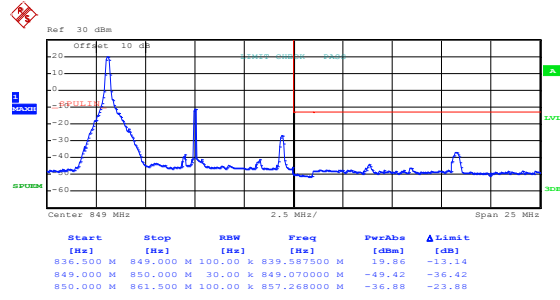
Highest channel

## LTE Band 5, BW: 10MHz 16QAM & RB Size 1



Date: 11.OCT.2019 15:07:25

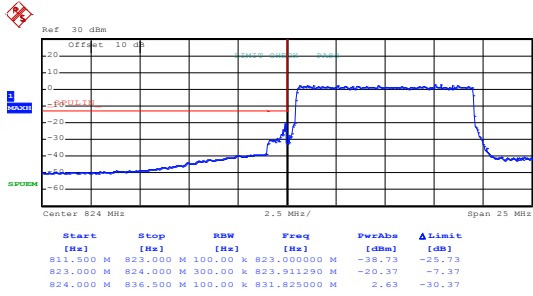
Lowest channel



Date: 11.OCT.2019 15:05:55

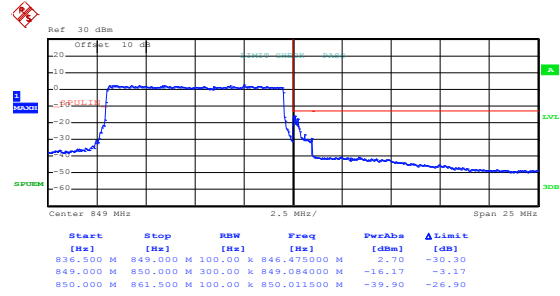
Highest channel

## 16QAM & RB Size 50



Date: 11.OCT.2019 15:07:04

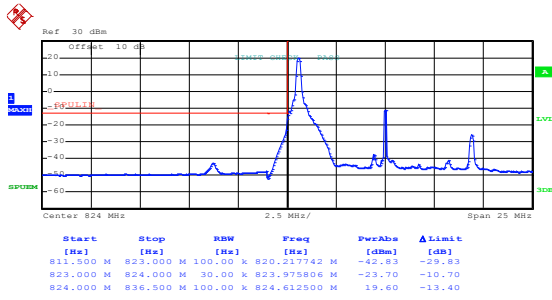
Lowest channel



Date: 11.OCT.2019 15:06:28

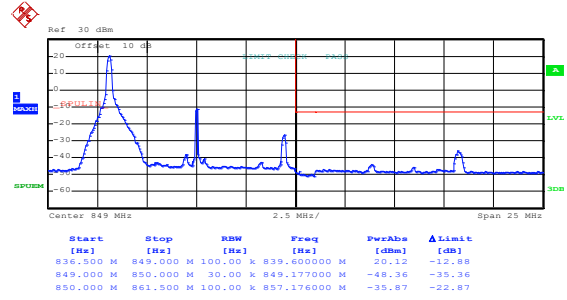
Highest channel

## LTE Band 5, BW: 10MHz QPSK & RB Size 1



Date: 11.OCT.2019 15:07:18

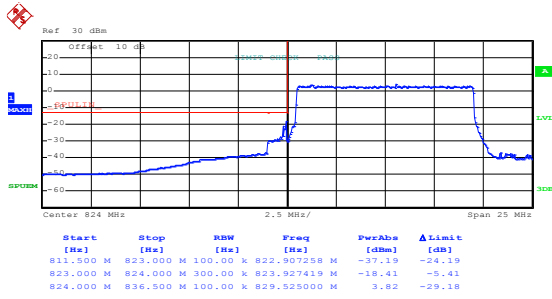
Lowest channel



Date: 11.OCT.2019 15:05:49

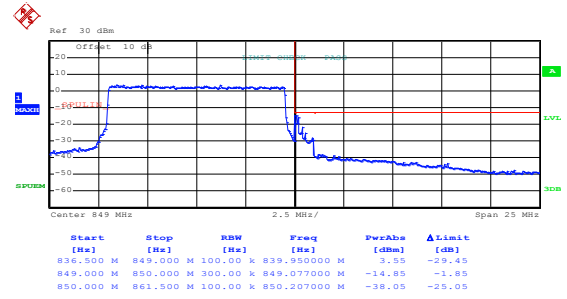
Highest channel

## QPSK & RB Size 50



Date: 11.OCT.2019 15:06:58

Lowest channel



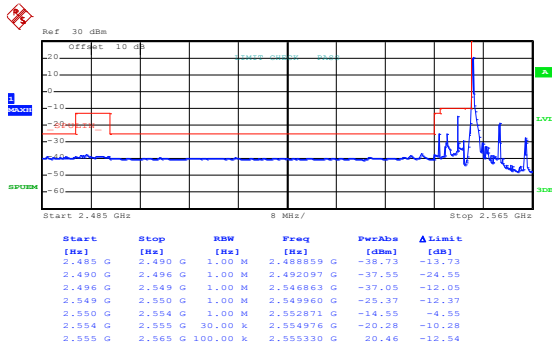
Date: 11.OCT.2019 15:06:20

Highest channel



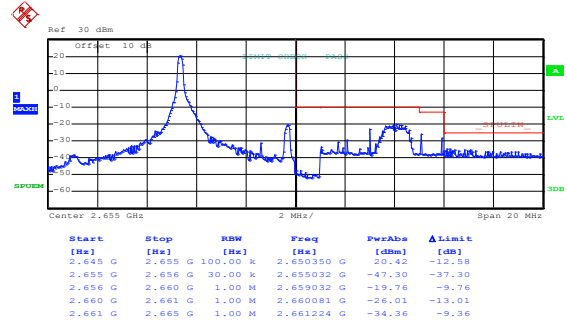
LTE Band 41 part:

LTE Band 41, BW: 5MHz  
16QAM & RB Size 1



Date: 11.OCT.2019 15:21:09

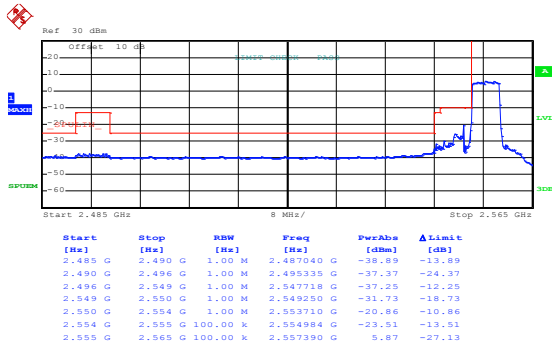
Lowest channel



Date: 11.OCT.2019 15:24:03

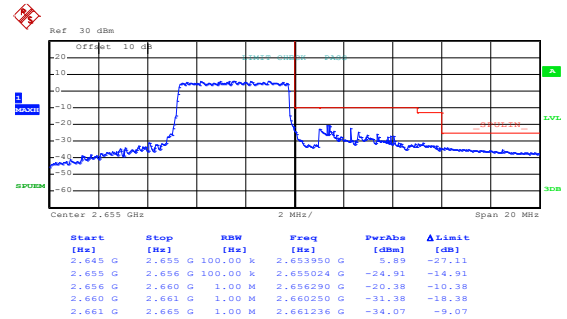
Highest channel

16QAM & RB Size 25



Date: 11.OCT.2019 15:21:38

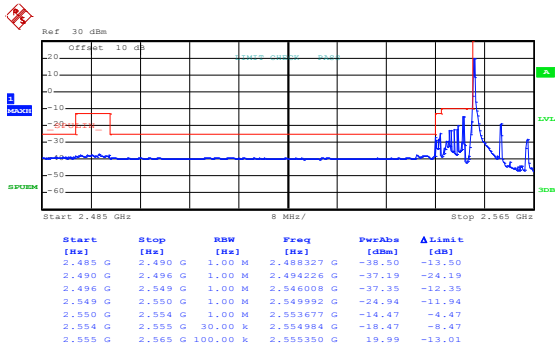
Lowest channel



Date: 11.OCT.2019 15:23:21

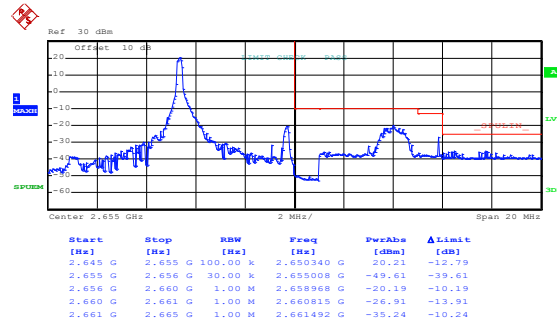
Highest channel

## LTE Band 41, BW: 5MHz QPSK & RB Size 1



Date: 11.OCT.2019 15:20:58

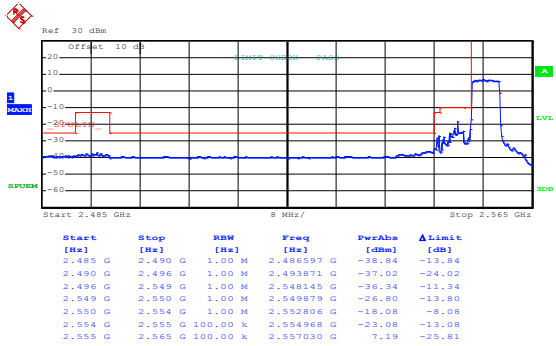
Lowest channel



Date: 11.OCT.2019 15:23:44

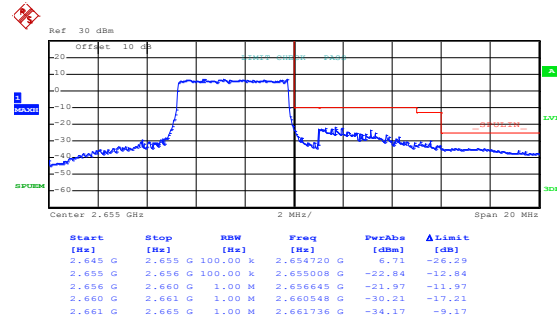
Highest channel

## QPSK & RB Size 25



Date: 11.OCT.2019 15:21:32

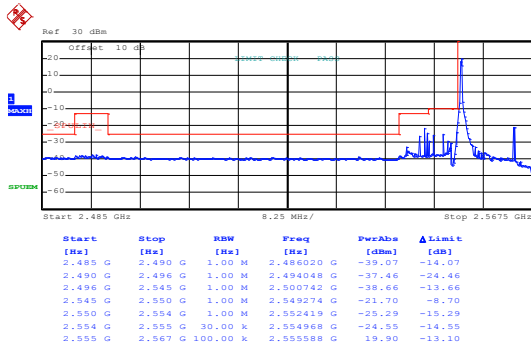
Lowest channel



Date: 11.OCT.2019 15:23:11

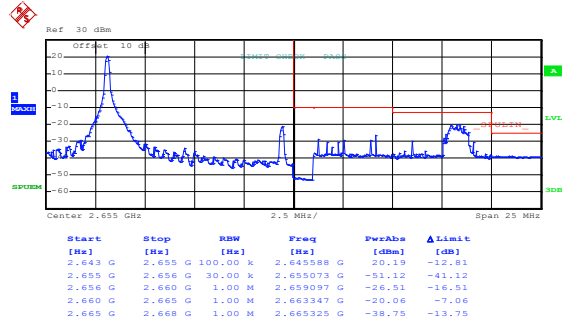
Highest channel

## LTE Band 41, BW: 10MHz 16QAM & RB Size 1



Date: 11.OCT.2019 15:28:38

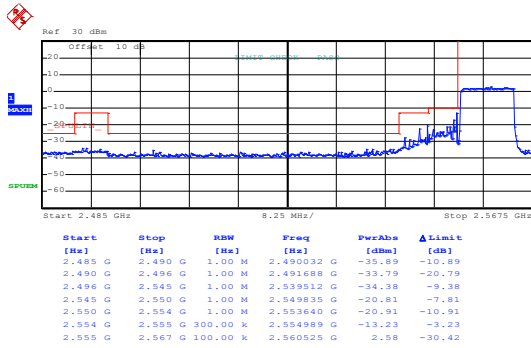
Lowest channel



Date: 11.OCT.2019 15:26:30

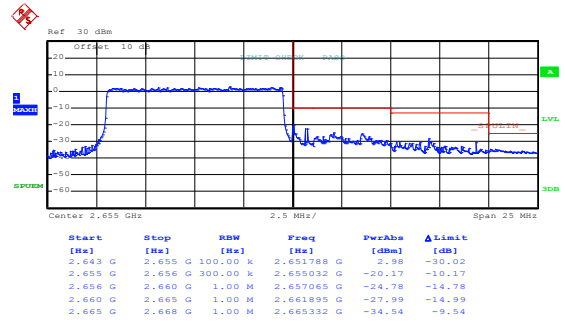
Highest channel

## 16QAM & RB Size 50



Date: 11.OCT.2019 15:27:45

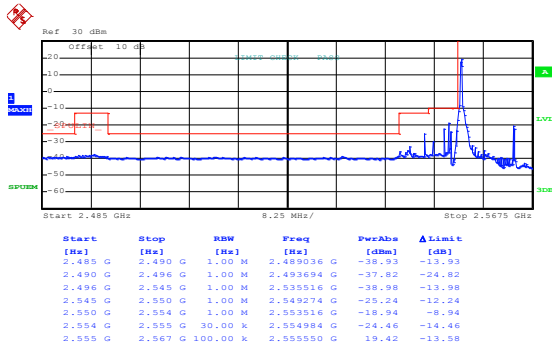
Lowest channel



Date: 11.OCT.2019 15:26:55

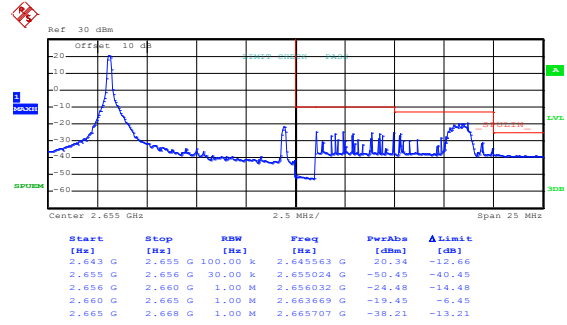
Highest channel

## LTE Band 41, BW: 10MHz QPSK & RB Size 1



Date: 11.OCT.2019 15:28:29

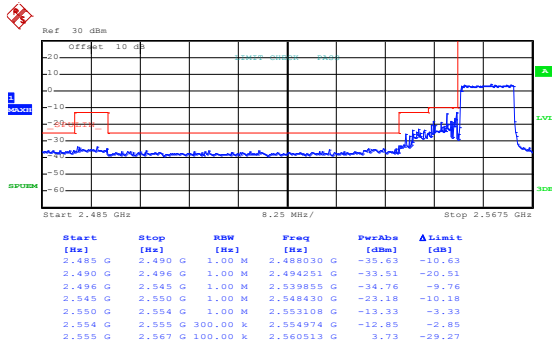
Lowest channel



Date: 11.OCT.2019 15:26:17

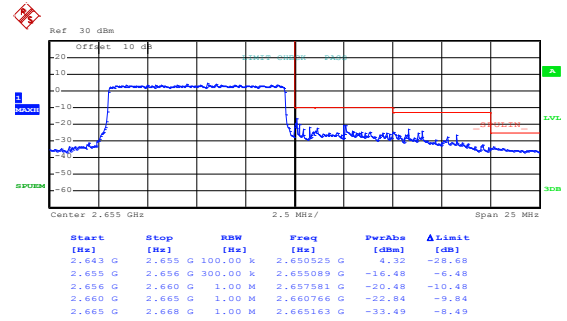
Highest channel

## QPSK & RB Size 50



Date: 11.OCT.2019 15:27:38

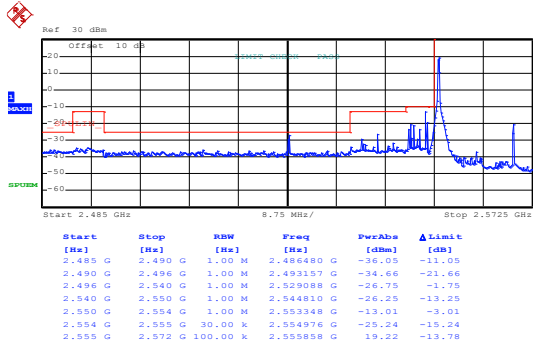
Lowest channel



Date: 11.OCT.2019 15:26:48

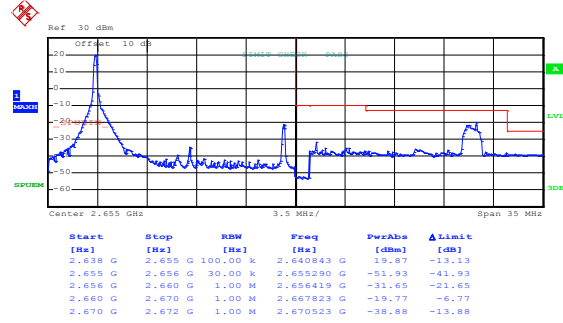
Highest channel

## LTE Band 41, BW: 15MHz 16QAM & RB Size 1



Date: 11.OCT.2019 15:29:43

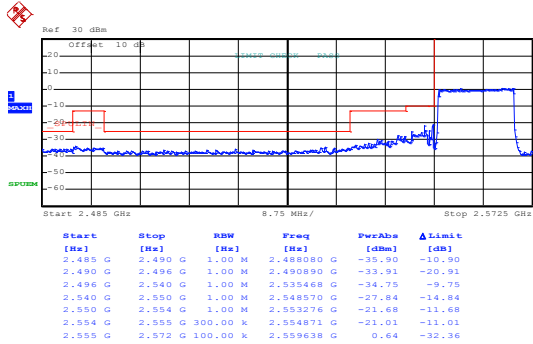
Lowest channel



Date: 11.OCT.2019 15:31:36

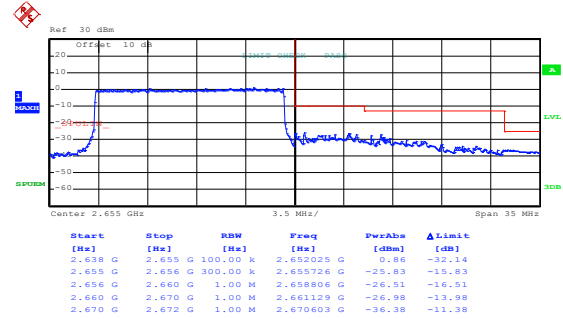
Highest channel

## 16QAM & RB Size 75



Date: 11.OCT.2019 15:30:08

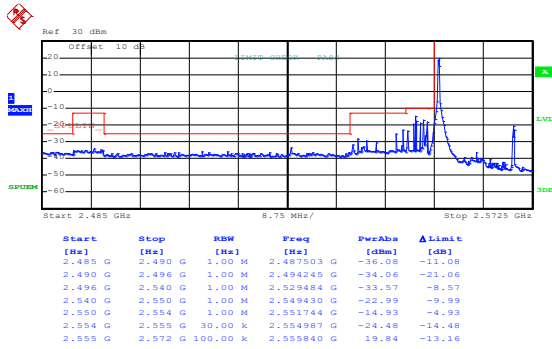
Lowest channel



Date: 11.OCT.2019 15:31:03

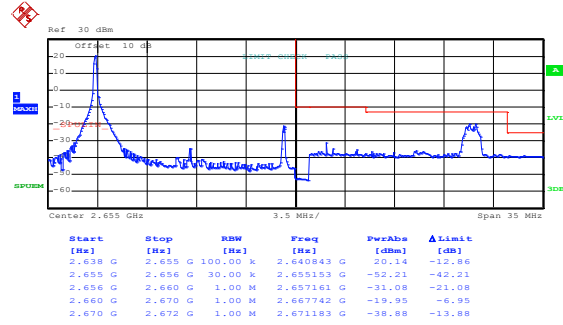
Highest channel

## LTE Band 41, BW: 15MHz QPSK & RB Size 1



Date: 11.OCT.2019 15:29:34

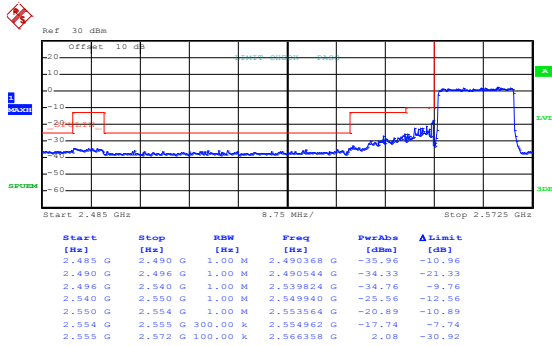
Lowest channel



Date: 11.OCT.2019 15:31:25

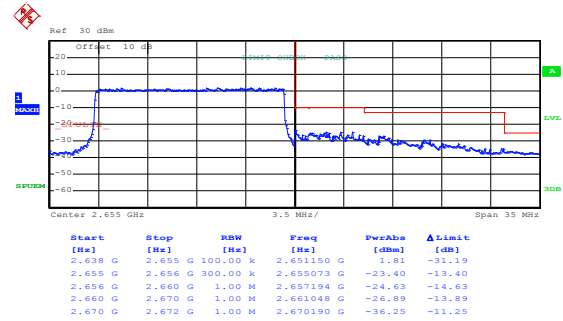
Highest channel

## QPSK & RB Size 75



Date: 11.OCT.2019 15:30:00

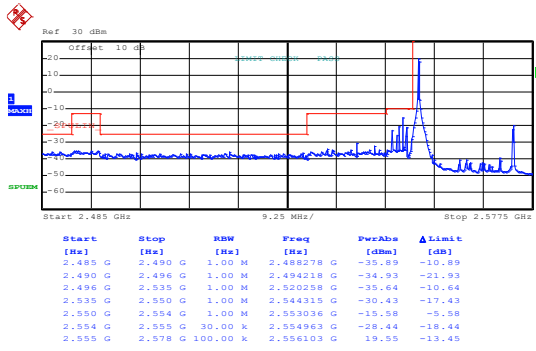
Lowest channel



Date: 11.OCT.2019 15:30:56

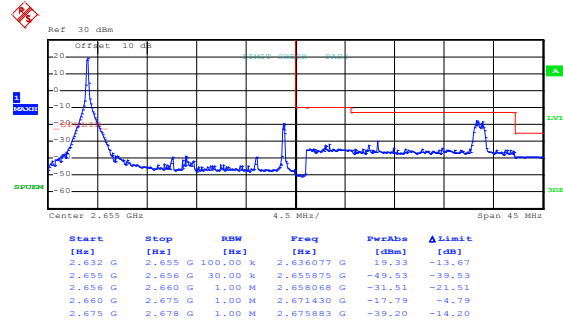
Highest channel

## LTE Band 41, BW: 20MHz 16QAM & RB Size 1



Date: 11.OCT.2019 15:34:53

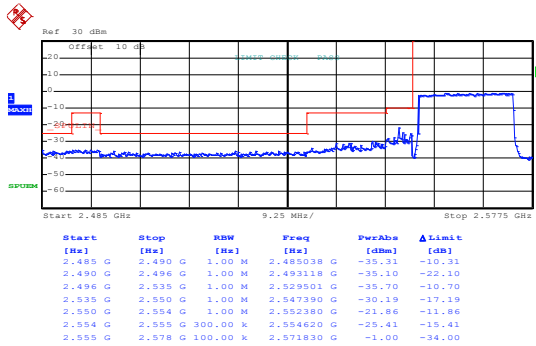
Lowest channel



Date: 11.OCT.2019 15:32:49

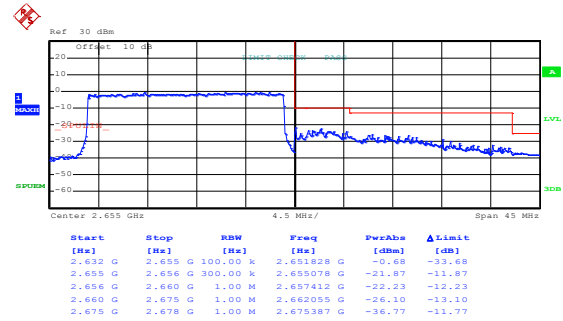
Highest channel

## 16QAM & RB Size 100



Date: 11.OCT.2019 15:34:11

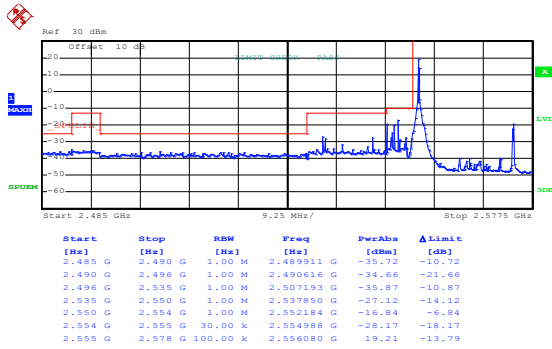
Lowest channel



Date: 11.OCT.2019 15:33:17

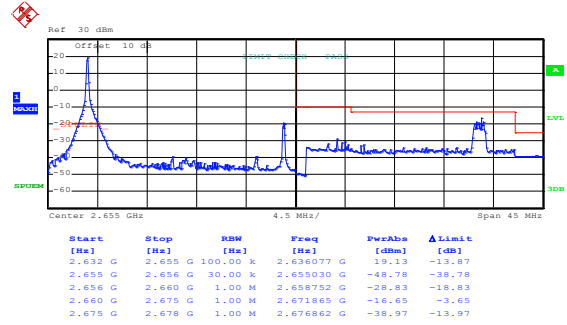
Highest channel

## LTE Band 41, BW: 20MHz QPSK & RB Size 1



Date: 11.OCT.2019 15:34:30

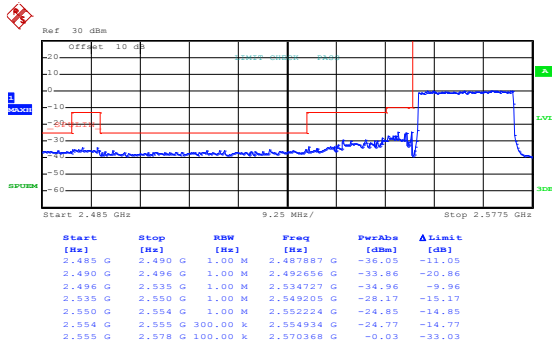
Lowest channel



Date: 11.OCT.2019 15:32:36

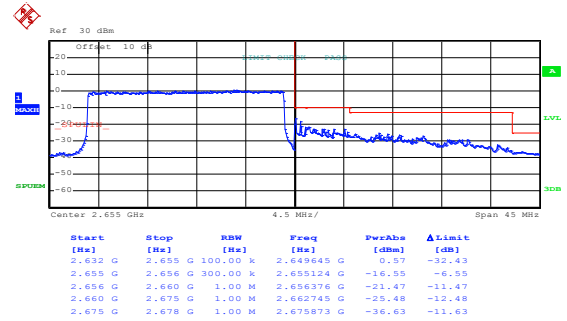
Highest channel

## QPSK & RB Size 100



Date: 11.OCT.2019 15:34:04

Lowest channel

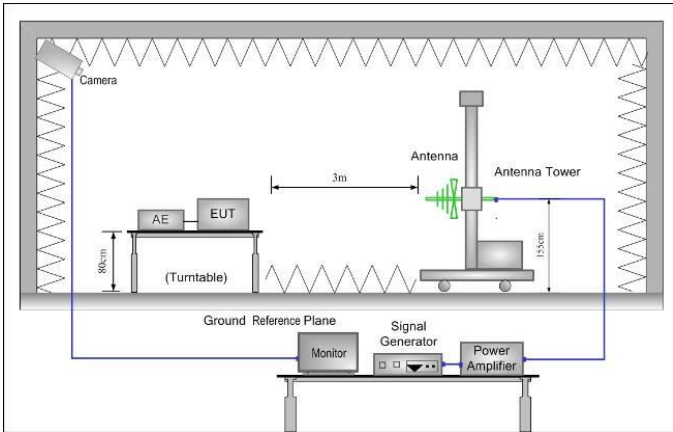
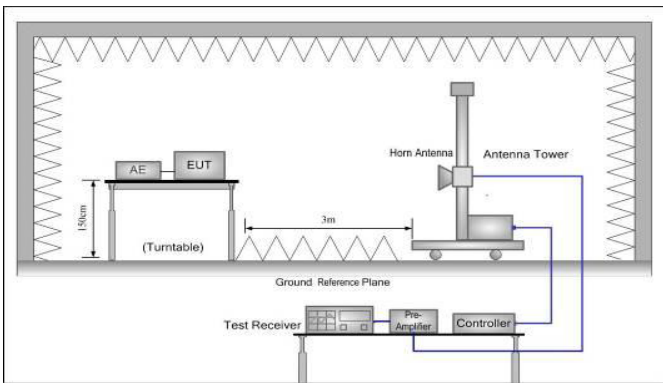


Date: 11.OCT.2019 15:33:07

Highest channel



## 6.5 Field strength of spurious radiation measurement

<p>Test Requirement:</p>	<p>Part 22.917(b), Part 27.53(m),</p>
<p>Limit:</p>	<p>LTE Band 5          The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least <math>43 + 10 \log_{10}(P)</math> dB (-13 dBm).          LTE Band 41:          For mobile digital stations, the attenuation factor shall be not less than <math>40 + 10 \log (P)</math> dB on all frequencies between the channel edge and 5 megahertz from the channel edge, <math>43 + 10 \log (P)</math> dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and <math>55 + 10 \log (P)</math> dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that <math>43 + 10 \log (P)</math> dB on all frequencies between 2490.5 MHz and 2496 MHz and <math>55 + 10 \log (P)</math> dB at or below 2490.5 MHz.</p>
<p>Test setup:</p>	<p>Below 1GHz</p>  <p>Above 1GHz</p> 
<p>Test Procedure:</p>	<ol style="list-style-type: none"> <li>1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.</li> <li>2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.</li> <li>3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission</li> </ol>

	<p>was determined using the substitution method.</p> <p>4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.  <math>ERP / EIRP = S.G. \text{ output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}</math></p>
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details.
Test results:	Passed

**Measurement Data:**

**LTE Band 5 part:**

LTE Band 5, WB: 1.4MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
1649.40	Vertical	-56.63	-13.00	Pass
2474.10	V	-38.15		
3298.80	V	-47.70		
1649.40	Horizontal	-54.56		
2474.10	H	-34.98		
3298.80	H	-42.93		
<b>Middle Channel</b>				
1673.00	Vertical	-54.62	-13.00	Pass
2509.50	V	-39.63		
3346.00	V	-46.21		
1673.00	Horizontal	-55.52		
2509.50	H	-34.72		
3346.00	H	-41.78		
<b>Highest Channel</b>				
1696.60	Vertical	-53.23	-13.00	Pass
2544.90	V	-40.25		
3393.20	V	-45.61		
1696.60	Horizontal	-54.25		
2544.90	H	-36.34		
3393.20	H	-42.17		
<p>Note:</p> <ol style="list-style-type: none"> <li>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</li> <li>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</li> </ol>				

LTE Band 5, WB: 3MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
1651.00	Vertical	-53.23	-13.00	Pass
2476.50	V	-39.63		
3302.00	V	-46.25		
1651.00	Horizontal	-55.52		
2476.50	H	-36.49		
3302.00	H	-41.72		
<b>Middle Channel</b>				
1673.00	Vertical	-53.23	-13.00	Pass
2509.50	V	-42.61		
3346.00	V	-46.76		
1673.00	Horizontal	-53.12		
2509.50	H	-36.44		
3346.00	H	-42.17		
<b>Highest Channel</b>				
1695.00	Vertical	-54.25	-13.00	Pass
2542.50	V	-42.63		
3390.00	V	-46.61		
1695.00	Horizontal	-54.25		
2542.50	H	-36.13		
3390.00	H	-41.79		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

LTE Band 5, WB: 5MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
1653.00	Vertical	-55.25	-13.00	Pass
2479.50	V	-39.62		
3306.00	V	-46.15		
1653.00	Horizontal	-55.72		
2479.50	H	-36.63		
3306.00	H	-41.75		
<b>Middle Channel</b>				
1673.00	Vertical	-55.25	-13.00	Pass
2509.50	V	-40.25		
3346.00	V	-45.69		
1673.00	Horizontal	-54.63		
2509.50	H	-36.26		
3346.00	H	-42.75		
<b>Highest Channel</b>				
1693.00	Vertical	-54.58	-13.00	Pass
2539.50	V	-41.63		
3386.00	V	-46.98		
1693.00	Horizontal	-53.23		
2539.50	H	-37.46		
3386.00	H	-41.75		
<p>Note:</p> <ol style="list-style-type: none"> <li>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</li> <li>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</li> </ol>				

LTE Band 5, WB: 10MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
1658.00	Vertical	-54.25	-13.00	Pass
2487.00	V	-40.25		
3316.00	V	-47.63		
1658.00	Horizontal	-54.63		
2487.00	H	-37.46		
3316.00	H	-42.15		
<b>Middle Channel</b>				
1673.00	Vertical	-54.25	-13.00	Pass
2509.50	V	-41.73		
3346.00	V	-45.29		
1673.00	Horizontal	-53.63		
2509.50	H	-36.25		
3346.00	H	-41.78		
<b>Highest Channel</b>				
1688.00	Vertical	-53.23	-13.00	Pass
2532.00	V	-42.13		
3376.00	V	-45.52		
1688.00	Horizontal	-53.69		
2532.00	H	-36.46		
3376.00	H	-42.78		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

**LTE Band 41 part:**

LTE Band 41, WB: 5MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
4997.00	Vertical	-43.36	-25.00	Pass
7495.50	V	-28.39		
9994.00	V	-27.49		
4997.00	Horizontal	-37.85		
7495.50	H	-29.01		
9994.00	H	-28.86		
<b>Middle Channel</b>				
5186.00	Vertical	-42.25	-25.00	Pass
7779.00	V	-29.63		
10372.00	V	-27.46		
5186.00	Horizontal	-36.63		
7779.00	H	-29.51		
10372.00	H	-27.45		
<b>Highest Channel</b>				
5375.00	Vertical	-41.32	-25.00	Pass
8062.50	V	-30.23		
10750.00	V	-27.48		
5375.00	Horizontal	-35.63		
8062.50	H	-28.61		
10750.00	H	-27.49		
<p>Note:</p> <ol style="list-style-type: none"> <li>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</li> <li>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</li> </ol>				

LTE Band 41, WB: 10MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
5002.00	Vertical	-42.32	-25.00	Pass
7503.00	V	-30.31		
10004.00	V	-29.64		
5002.00	Horizontal	-37.63		
7503.00	H	-31.26		
10004.00	H	-28.95		
<b>Middle Channel</b>				
5186.00	Vertical	-42.25	-25.00	Pass
7779.00	V	-29.36		
10372.00	V	-32.25		
5186.00	Horizontal	-34.61		
7779.00	H	-28.79		
10372.00	H	-38.67		
<b>Highest Channel</b>				
5370.00	Vertical	-42.15	-25.00	Pass
8055.00	V	-30.23		
10740.00	V	-29.96		
5370.00	Horizontal	-36.75		
8055.00	H	-30.14		
10740.00	H	-29.79		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

LTE Band 41, WB: 15MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
5007.00	Vertical	-42.52	-25.00	Pass
7510.50	V	-27.46		
10014.00	V	-26.63		
5007.00	Horizontal	-38.56		
7510.50	H	-27.15		
10014.00	H	-29.76		
<b>Middle Channel</b>				
5186.00	Vertical	-41.25	-25.00	Pass
7779.00	V	-28.63		
10372.00	V	-27.73		
5186.00	Horizontal	-36.44		
7779.00	H	-29.15		
10372.00	H	-27.44		
<b>Highest Channel</b>				
5365.00	Vertical	-42.25	-25.00	Pass
8047.50	V	-29.63		
10730.00	V	-27.42		
5365.00	Horizontal	-35.62		
8047.50	H	-28.16		
10730.00	H	-26.73		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				



LTE Band 41, WB: 20MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
5012.00	Vertical	-42.23	-25.00	Pass
7518.00	V	-29.63		
10024.00	V	-27.46		
5012.00	Horizontal	-36.23		
7518.00	H	-30.26		
10024.00	H	-27.78		
<b>Middle Channel</b>				
5186.00	Vertical	-41.23	-25.00	Pass
7779.00	V	-30.17		
10372.00	V	-31.32		
5186.00	Horizontal	-35.79		
7779.00	H	-29.15		
10372.00	H	-27.74		
<b>Highest Channel</b>				
5360.00	Vertical	-43.23	-25.00	Pass
8040.00	V	-29.12		
10720.00	V	-28.56		
5360.00	Horizontal	-37.46		
8040.00	H	-29.98		
10720.00	H	-30.15		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

## 6.6 Frequency stability V.S. Temperature measurement

Test Requirement:	Part 22.355, Part 27.54, Part 2.1055(a)(1)(b)
Limit:	±2.5ppm
Test setup:	
Test procedure:	<ol style="list-style-type: none"> <li>1. The equipment under test was connected to an external DC power supply and input rated voltage.</li> <li>2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators.</li> <li>3. The EUT was placed inside the temperature chamber.</li> <li>4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency.</li> <li>5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.</li> <li>6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached</li> </ol>
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

**Measurement Data (worst case):**

**LTE Band 5 part:**

Reference Frequency: LTE Band 5 (10MHz) Middle channel=20525 channel=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
<b>QPSK</b>					
3.70	-30	190	0.227137	±2.5	Pass
	-20	155	0.185296		
	-10	168	0.200837		
	0	123	0.147041		
	10	186	0.222355		
	20	174	0.208010		
	30	114	0.136282		
	40	105	0.125523		
	50	150	0.179319		
<b>16QAM</b>					
3.70	-30	169	0.202032	±2.5	Pass
	-20	159	0.190078		
	-10	150	0.179319		
	0	146	0.174537		
	10	138	0.164973		
	20	130	0.155409		
	30	126	0.150628		
	40	117	0.139868		
	50	110	0.131500		
<i>Note: Only the worst case shown in the report.</i>					

**LTE Band 41:**

Reference Frequency: LTE Band 41 (5MHz)Middle channel=40740 channel=2605.0MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
<b>QPSK</b>					
3.70	-30	189	0.072553	±2.5	Pass
	-20	137	0.052591		
	-10	168	0.064491		
	0	118	0.045298		
	10	163	0.062572		
	20	171	0.065643		
	30	110	0.042226		
	40	106	0.040691		
	50	156	0.059885		
<b>16QAM</b>					
3.70	-30	154	0.059117	±2.5	Pass
	-20	127	0.048752		
	-10	142	0.054511		
	0	120	0.046065		
	10	139	0.053359		
	20	149	0.057198		
	30	143	0.054894		
	40	133	0.051056		
	50	113	0.043378		
<i>Note: Only the worst case shown in the report.</i>					

## 6.7 Frequency stability V.S. Voltage measurement

Test Requirement:	Part 22.355, Part 27.54, Part 2.1055(d)(2)
Limit:	±2.5ppm
Test setup:	
Test procedure:	<ol style="list-style-type: none"> <li>1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage.</li> <li>2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.</li> <li>3. Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.</li> </ol>
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

**Measurement Data (worst case):**

**LTE Band 5 part:**

Reference Frequency: LTE Band 5(10MHz) Middle channel=20525 channel=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.20	98	0.117155	±2.5	Pass
	3.70	81	0.096832		
	3.50	74	0.088464		
16QAM					
25	4.20	88	0.105200	±2.5	Pass
	3.70	69	0.082487		
	3.50	48	0.057382		

*Note: Only the worst case shown in the report.*

**LTE Band 41:**

Reference Frequency: LTE Band 41 (10MHz) Middle channel=40740 channel=2605.0MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.20	90	0.034549	±2.5	Pass
	3.70	74	0.028407		
	3.50	53	0.020345		
16QAM					
25	4.20	88	0.033781	±2.5	Pass
	3.70	66	0.025336		
	3.50	57	0.021881		

*Note: Only the worst case shown in the report.*